

FIRST REPORT

OF THE

MASSACHUSETTS COMMISSION ON HOSPITALS
FOR CONSUMPTIVES.

1907.

[Also the 4th - 10th reports of the Trustees of
Massachusetts hospitals for consumptives]



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MASSACHUSETTS

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COMMISSIONERS.

ARTHUR T. CABOT, M.D., *Chairman.*

CHARLES H. ADAMS.

WILLIAM D. MCFEE, M.D.

ALVAH CROCKER.

CHARLES H. PORTER.

ALBERT C. GETCHELL, M.D.

JEREMIAH SMITH, Jr.

SYLVIA B. KNOWLTON.

W. C. GODFREY.

JOHN B. HAWES, 2d, M.D., *Secretary.*

309 FORD BUILDING, 15 ASHBURTON PLACE, BOSTON.

Commonwealth of Massachusetts.

REPORT OF THE MASSACHUSETTS STATE COMMISSION ON HOSPITALS FOR CONSUMPTIVES.

To His Excellency the Governor of the Commonwealth and to the Honorable Council.

In accordance with chapter 474 of the Acts of 1907, entitled "An Act to provide for establishing three sanatoriums for tubercular patients," His Excellency Governor Guild appointed Dr. Arthur T. Cabot, Charles H. Adams, Alvah Crocker, Dr. Albert C. Getchell, W. C. Godfrey, Mrs. Sylvia B. Knowlton, Dr. William D. McFee, Charles H. Porter and Jeremiah Smith, Jr., as a commission to build three sanatoriums for consumptives, one in the Connecticut valley, one in the northeastern part of the State and one in the southeastern part of the State. In addition to this, the commission was given the power to disseminate information throughout the State in regard to tuberculosis, and to establish dispensaries and out-patient departments as was thought best.

The first meeting of the commission was held Sept. 2, 1907. Dr. Arthur T. Cabot of Boston was elected chairman, and Dr. John B. Hawes of Boston was made secretary.

In view of the permanent character of this Board and the wide scope of its work, it was thought best to provide working quarters for the commission where information could be accumulated and put in accessible form, and in which the business of the undertaking could be conducted and recorded in orderly manner. Accordingly, an office was secured in the Ford building, 15 Ashburton Place, and suitable provisions made for carrying on the present work of the commission.

At a regular meeting of the Board, held October 15, it was voted that the official name of this commission be the Massachusetts Commission on Hospitals for Consumptives.

Small sub-committees were appointed to investigate sites for the three hospitals named in the act. It was decided that the plans of the hospital in the northeastern part of the State should first be taken up.

In view of the fact that the superintendent of such a hospital should be acquainted with all the details of his work from the very beginning, it was voted to select a suitable man as superintendent of this northeastern hospital at once, stating that his term of office will commence probably in the summer of 1908, but that he will be expected to keep in close touch with the building of the hospital, of which he is to be in charge, from the very beginning. The Board elected Dr. E. B. Emerson, at present assistant superintendent of the State Hospital at Tewksbury, who was highly recommended, and who has had long and thorough training in institutional work. Dr. Emerson has accepted this position. The salary agreed upon is \$2,500 per annum, to begin when he takes actual charge of the work.

The sub-committee in charge of the northeastern hospital, consisting of Dr. Arthur T. Cabot and Mr. Alvah Crocker of Fitchburg, were requested to make a search for a suitable site for this hospital in that part of the State convenient to the cities of Lowell, Lawrence, Salem, Haverhill, Lynn, etc.

The qualifications of a site for an institution for cases of advanced or moderately advanced tuberculosis were considered by the Board. A moderate elevation of one hundred to three hundred feet, dry soil, a southerly exposure, and a certain amount of pine grove and shelter trees for protection were declared to be desirable. A tract of land comprising at least one hundred and fifty acres was thought necessary. Ease of access to the larger cities and towns in the region from which such a hospital would draw its patients was a prime qualification. Proper water supply and means of making a sewerage system in an efficient and economical way were important.

Various sites were inspected in the region near Wilmington, Andover, Haverhill and Georgetown. At the regular meet-

ing of the commission, held November 19, the sub-committee on the sites for this northeastern hospital handed in its report. Dr. Emerson also gave a detailed description of the various sites.

A certain piece of land near Georgetown, Mass., known as the "Little Farm," was finally chosen as the best suited for the hospital. Power was given to the chairman to obtain an option on the land. After the option was obtained the members of the Board personally inspected the property, and voted to purchase it.

This property consists of a large farm of one hundred and eighty-six acres, situated on a beautiful hill, from which a magnificent view is obtained in all directions. A pine grove, a large apple orchard of young trees and an oak grove add to its attractions. There are two large houses on the property, in excellent condition, and an old barn. Much of the land is under cultivation, and the entire property has been well kept up as a farm. The top of the hill is about half a mile from the railroad. The elevation is over two hundred feet. An engineer has inspected this land, and is of the opinion that a water supply can be obtained near by. John A. Fox, the architect selected to make plans for this hospital, has been very favorably impressed by the site. Georgetown is within an hour's journey of Boston, and within easy reach of Haverhill, Lawrence, Lowell, Newburyport, Salem and Lynn.

The sub-committees on sites for hospitals in the Connecticut valley and the southeastern part of the State are investigating those regions.

It was also ordered in the act (chapter 474, section 9) that this Board "may disseminate information as to the best methods of combating the disease."

Taking up this part of its duties, the Board has arranged a plan for frequent short articles in the newspapers of the Commonwealth. One bulletin has already been sent to one hundred and ninety-five newspapers and periodicals throughout the State, and the editors have shown a very general desire to co-operate with the commission in this effort. Other articles dealing with various phases of the tuberculosis question will follow at suitable intervals.

It is the opinion of the commission that the present appropriation will be insufficient to complete the construction and furnishing of the hospitals called for. It is to be remembered that each hospital is to be provided not only with accommodation for one hundred and fifty patients, but must also provide for the accommodation of the superintendent and his family, of his assistants, and of nurses and other help needed in the carrying on of the work, and must also include buildings for heating and supplying power. A proper water supply and sewerage system are of the greatest importance; this will be a source of considerable expense.

It is hoped that before the Legislature is ready to take up a consideration of this report the commission will be able to supply more accurate data in regard to the probable expense of the undertaking.

The commission would respectfully suggest that, as it may become absolutely necessary to acquire certain tracts of land for a water supply or for other purposes, this Board be given power to take such land as it may deem necessary by right of eminent domain.

Disbursements to Nov. 30, 1907, are as follows:—

Salary of secretary (at \$1,500 per year),	\$250 00
Salary of stenographer (at \$850 per year),	141 66
Rent of office (at \$725 per year),	151 05
Running expenses, etc.,	622 58
	<hr/>
	\$1,165 29

Respectfully submitted,

ARTHUR T. CABOT.

BOSTON, MASS., Nov. 30, 1907.

SECOND ANNUAL REPORT

OF THE

MASSACHUSETTS COMMISSION ON HOSPITALS
FOR CONSUMPTIVES.

NOVEMBER 30, 1908.



BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1909.

APPROVED BY
THE STATE BOARD OF PUBLICATION.

COMMISSIONERS.

ARTHUR T. CABOT, M.D., *Chairman.*

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3 JOY STREET, BOSTON.

Commonwealth of Massachusetts.

REPORT OF THE MASSACHUSETTS STATE COMMISSION ON HOSPITALS FOR CONSUMPTIVES.

*To His Excellency the Governor of the Commonwealth and to the
Honorable Council.*

In accordance with the terms of the act establishing this commission (chapter 474 of the Acts of 1907), this Board has now secured three tracts of land as sites for the three hospitals which it is to build.

NORTHEASTERN HOSPITAL.

The Georgetown property mentioned in our last report was given up partly on account of the determined opposition of the townspeople and also on account of the lack of a sufficient supply of water on the property itself; for, in view of the feeling in the town, we feared difficulty and delay in arranging with the town for a joint supply. The commission therefore accepted the offer of the people of Georgetown to take the option off its hands, and at once turned to a piece of property in North Reading which had already been examined and found favorable. After considerable delay, owing to the fact that the owners were not anxious to sell, this property, consisting of 101 acres, with a small house and barn, was secured for \$5,000. It is conveniently situated on the Wilmington branch of the Boston & Maine Railroad, and lies not far from the Boston & Northern line of electrics. The land is of moderate elevation, southerly exposure, well wooded and of gravelly soil. Competent engineers have stated that there is abundant water supply, and that the opportunities for proper sewage disposal are excellent.

The plans, which had already been much studied, were now perfected and adapted to this site, under direction of Dr. E. B. Emerson, superintendent of the Northeastern Hospital, late of the State Hospital at Tewksbury. As soon as they were ready an estimate of cost was obtained, and after much study and readjustment of parts and simplification of detail it was found that the cost could in all probability be brought within the appropriation. On Aug. 19, 1908, these plans were submitted to Lieutenant-Governor Draper, then acting as Governor, and to the Council, and were accepted by them. The contract for constructing the buildings of this hospital has been awarded to the firm of Hardy & Cole of Andover, for the sum of \$54,010. It calls for the completion of the work by July 1, 1909. Other contracts for plumbing, heating, etc., will be awarded independently.

The hospital will consist of a group of eight buildings. A three-story administration and domestic building will be the central figure of this group. This will be of wood, and will contain the superintendent's offices and living rooms, the dining rooms for patients and for nurses and officers, kitchen, store-rooms, offices and bedrooms. On either side of this, arranged as symmetrically as the grounds will permit, will be the two closed wards for the very sick patients; there will be rooms in these buildings for nurses, entirely separate, however, from the rooms occupied by patients, and reached by a separate staircase. The wards will be simple one-story structures, so built that the patients' beds can be easily rolled out on to the piazza in pleasant weather. Beyond these wards will be placed the open pavilions for the less advanced cases. The patients in these pavilions, while they have warm dressing and locker rooms, sleep practically in the open air, the southern side of each pavilion being entirely open. The abundant growth of pines and other trees screen the wards from the cold winds and from observation, and will make it possible to provide many pleasant and attractive seats where patients who are able to do so can spend their days in the open air. At some distance from these main buildings will be the heat, light and power plant and the pumping station.

SOUTHEASTERN HOSPITAL.

For the hospital in southeastern Massachusetts, after a thorough investigation of the central portion of this region, the commission selected a tract of land in Lakeville, just outside of the town of Middleborough, on the trolley line between Middleborough and New Bedford, and within a mile of the Middleborough station. This land, known as the Doggett estate, consists of some 75 acres of land, of good quality, sloping south, sparsely wooded, with abundant facilities for the disposal of sewage and for obtaining a water supply. This property was purchased for \$4,125. Dr. Sumner Coolidge of Watertown, who for the last three or four years has been with Dr. Gorgas, chief of the medical department of Panama, has been appointed superintendent of this hospital. The land has been surveyed and plans for this hospital prepared, which have been approved by the Governor and his Council. It is expected that contracts for building this hospital will be awarded in the near future.

The plans for this hospital call for three large buildings, — the administration building, containing offices, rooms for the superintendent and assistants, dining rooms, and two large ward buildings, one for men and one for women, which together will hold all the patients which the hospital is to accommodate. These ward buildings will each contain two closed wards for the very sick patients, and two open wards or pavilions for those patients in the earlier stages of the disease. In addition to this, there will be a building for power, lighting and heating, with laundry attached.

WESTERN HOSPITAL.

An extensive survey of sites in the western part of the State has been made, with the result that a tract of land known as the Huot property, in the town of Westfield, on the Springfield & Westfield electric line, was secured. This property consists of a large tract of some 128 acres, partly wooded and partly under cultivation, with a large barn and a house in good repair. This land was purchased for \$6,000. The land is high, slopes to the south, has a good water supply, and commands a fine view of the Westfield River valley. The tracks of

the Boston & Albany Railroad touch this Westfield property, and there is on the grounds a spur track which will be of great assistance in bringing building materials and supplies. Dr. Henry D. Chadwick, formerly a practising physician of Waltham, Mass., and until now superintendent of the Vermont State Sanatorium, has been appointed superintendent of the hospital to be built here, and is at work on the plans.

On October 15 the Board changed its offices from the Ford Building to the Twentieth Century Club Building, 3 Joy Street.

Disbursements have been as follows:—

To Nov. 30, 1907,	\$1,093 66
To Nov. 30, 1908, as follows:—	
Salary of secretary,	\$1,500 00
Salary of stenographer,	849 99
Rent of offices,	694 83
Running expenses, etc.,	715 03
Northeastern Hospital,	8,880 30
Southeastern Hospital,	4,505 63
Western Hospital,	6,240 38
	<hr/>
	23,386 16
	<hr/>
	\$24,479 82
Original appropriation,	\$300,000 00
Disbursements,	24,479 82
	<hr/>
Balance,	\$275,520 18

Section 9 of the act establishing this commission states that: "They may also establish out-patient departments, and may disseminate information as to the best methods of combating the disease." The work done by this Board along these lines has been largely a campaign of publicity. From time to time during the past year the Board has drawn up short bulletins on subjects of timely interest as regards tuberculosis and its prevention, and has sent copies of these to 195 newspapers, daily, weekly and religious, in this State. These bulletins have been

printed extensively throughout Massachusetts. The subjects touched upon during the past year have been as follows: The Need of forming Dispensaries and Clinics for the Tuberculous; Tuberculosis Classes in Boston; Day Camps for Tuberculosis; Tuberculosis in Factories and Stores; The International Congress on Tuberculosis, etc. The fact that this commission expects to be a disseminating center and source of information on all matters pertaining to the tuberculosis campaign has been widely advertised, and as a result inquiries of various kinds in regard to this question have been received from all parts of the State and from outside the State. These have in every case been answered in as full and satisfactory a manner as possible.

In addition to this, the chairman and secretary of this Board have spoken at numerous public meetings which have been held by various District Committees of the Massachusetts Medical Society, in connection with the tuberculosis exhibit, or by women's clubs, churches or other organizations, and have there described the work that the medical profession in the State and the State itself is doing and expects to do. They have urged cities, towns and villages to co-operate with the State work, and have described how this can best be done. In particular, they have urged cities and towns throughout the State to form tuberculosis associations, dispensaries, clinics and day camps, and have furnished information as to the best and most practical way of doing this. Thus, when the three hospitals being built by this commission are completed and in readiness to receive patients, there will be throughout the State organizations ready to send to these institutions patients who need treatment. In this way these hospitals will reach their greatest usefulness in the shortest possible time.

During the past year tuberculosis associations or committees have been formed in the following places: Andover, Brockton, Brookline, Chelsea, Clinton, Everett, Fall River, Fitchburg, Gloucester, Haverhill, Holyoke, Lawrence, Lynn, Malden, Newton, Northampton, Pittsfield, Quincy, Salem, Walpole, Waltham.

Day camps have been established in Brookline, Cambridge, Clinton, Holyoke, Lawrence, Salem, Springfield and Woburn.

Clinics for tuberculosis or tuberculosis classes have been

formed in Haverhill, Holyoke, Lawrence, Malden, Northampton, Salem and Springfield.

The greater part of this work is due to the efforts of the Associated Committees of the Massachusetts Medical Society. This Board, however, is in the closest touch with these committees and with the work being done by the medical profession in the State.

In the spring of this year there was passed House Bill No. 257: "An Act relative to Instruction in the Public Schools as to Tuberculosis and its Prevention." The State Board of Education appointed a committee of physicians to draw up a pamphlet on the subject, to be used by teachers in the public schools. The chairman and secretary of this commission were made respectively the chairman and secretary of the committee appointed to do this, and the work of drawing up and writing this pamphlet was done in the offices of this commission.

In September of this year the International Congress on Tuberculosis was held in Washington. The Massachusetts Legislature appropriated the sum of \$3,800 to be spent for representing this State in this Congress. This money was to be used by the Massachusetts State Committee on the International Congress, under the direction of the State Board of Health. This Massachusetts Committee consisted of approximately one hundred physicians and laymen throughout the State. The chairman and secretary of this Board were chosen to fill similar positions on this State Committee. The work to be done consisted, first, in preparing a suitable State exhibit; second, as an important part of the exhibit, the writing and publishing of a memoir, a large volume, which in several chapters covered the history, development and present status of the tuberculosis question in Massachusetts; third, in arousing interest in the Congress among the medical profession and the public in this State. The committee began its work in January, 1908. With the exception of the memoir, the greater part of the work was done in the offices of this commission; and the fact that this commission is in close touch with the tuberculosis organizations in the State has made it possible for Massachusetts to be creditably represented at this Congress in Washington.

Thus the offices of this commission have been a central point, where various anti-tuberculosis agencies of the State have carried on their activities. The Board has co-operated and has been in close touch with other boards, — the State Board of Health, the State Board of Education, the medical profession of the State, the International Congress on Tuberculosis, etc. Tuberculosis hospitals, sanatoria, private and public associations, dispensaries and classes send us their reports and information as to all they are doing. It is to be expected that this part of the commission's work will grow in importance and usefulness each year.

In view of the fact that the commission has had from the start so many activities besides those directly concerning the three hospitals, it seems proper that the expenses of their office and the salaries of their office force should not be taken out of the appropriation of \$300,000 voted for building the hospitals.

We would ask that an appropriation be made to cover the above expenses of the office; and, as one if not two of the hospitals are expected to be ready for occupancy before the next Legislature meets, we would ask that funds for the maintenance of this commission and of these hospitals be appropriated in accordance with the following schedules: —

Estimate for Maintenance of Office of Commission on Hospitals for Consumptives.

Salary of secretary,	\$1,500 00
Salary of stenographer and clerk,	950 00
Rent of offices,	800 00
Running expenses, including: —	
Postage,	\$100 00
Printing report and educational leaflets for distribution,	500 00
Miscellaneous expenses,	1,000 00
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	1,600 00
	<hr/>
	\$4,850 00

Estimate for Maintenance of Sanatorium at North Reading.

	Twelve Months.	One Month.
Salaries,	\$26,620 00	\$2,218 333
Food,	30,578 00	2,548 166
Farm, stable, etc.,	2,100 00	175 000
Heat, light and power,	6,400 00	533 333
Furnishings,	1,800 00	150 000
Miscellaneous,	9,500 00	791 666
	\$76,998 00	\$6,416 498

Per capita per week, \$9.87+

Special appropriations: —

Horses, teams, harnesses, etc.,	\$3,200 00
For repairs and additions to stable,	4,000 00
Tools and farming implements,	300 00
Grading and improvements,	2,200 00
Spur track and freight shed,	1,000 00
	\$10,700 00

Estimate for Maintenance of Sanatorium at Lakeville.

	Twelve Months.	One Month.
Salaries, wages and labor,	\$28,480 00	\$2,373 33½
Food, 150 patients at \$4 per week,	31,200 00	2,600 00
Farm, stable and grounds,	2,160 00	180 00
Heat, light and power,	7,000 00	583 33½
Furnishings, breakage and repair,	1,800 00	150 00
Miscellaneous,	9,000 00	750 00
	\$79,640 00	\$6,636 66½

Per capita per week, \$10.21+

Special appropriations:—

Horses, vehicles, harnesses, etc.,	.	.	.	.	.	\$3,250 00
Tools and farming implements,	.	.	.	.	.	300 00
Grading and improvements,	.	.	.	.	.	2,200 00
Draining pond,	.	.	.	.	.	700 00
Barn,	.	.	.	.	.	6,000 00

\$12,450 00

Respectfully submitted,

ARTHUR T. CABOT.

CHARLES H. ADAMS.

ALVAH CROCKER.

ALBERT C. GETCHELL.

WILLIAM C. GODFREY.

SYLVIA B. KNOWLTON.

WILLIAM D. McFEE.

CHARLES H. PORTER.

JEREMIAH SMITH, JR.

APPENDIX.

The following figures represent preliminary estimates of the cost of construction of the hospitals at North Reading and at Lakeville, as presented to the Governor and the Council and approved by them:—

Estimate of Cost of Construction of Sanatorium at North Reading.

Land,	\$5,000 00
Expenses of commission, surveys, etc.,	3,000 00
Water,	5,000 00
Buildings, including plumbing,	58,677 00
Laundry,	1,558 00
Sewer,	2,000 00
Generator,	1,730 00
Electric wiring,	1,635 00
Heating of buildings, boilers, smoke stack, water heaters, etc.,	12,375 00
	<hr/>
	\$90,975 00
Architect and furnishing,	9,025 00
	<hr/>
	\$100,000 00

Estimate of Cost of Construction of Sanatorium at Lakeville.

Land,	\$4,125 00
Expenses of commission, surveys, etc.,	2,323 01
Water,	3,250 00
Buildings, including plumbing,	64,700 00
Laundry,	1,500 00
Sewer,	1,800 00
Generator and engine,	1,680 00
Electric wiring,	1,400 00
Heating of buildings, boilers, smoke stack, water heaters, etc.,	9,000 00
	<hr/>
	\$89,778 01
Architect and furnishing,	10,221 99
	<hr/>
	\$100,000 00

THIRD ANNUAL REPORT
OF THE
MASSACHUSETTS COMMISSION ON HOSPITALS
FOR CONSUMPTIVES.

NOVEMBER 30, 1909.



BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
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COMMISSIONERS.

ARTHUR T. CABOT, M.D., *Chairman.*

CHARLES H. ADAMS.

WILLIAM C. GODFREY.

ALVAH CROCKER.

SYLVIA B. KNOWLTON.

ARTHUR DRINKWATER.

WILLIAM D. MCFEE, M.D.

ALBERT C. GETCHELL, M.D.

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JOHN B. HAWES, 2d, M.D., *Secretary.*

3 JOY STREET, BOSTON.

The Commonwealth of Massachusetts.

REPORT OF THE MASSACHUSETTS COMMISSION ON HOSPITALS FOR CONSUMPTIVES.

To His Excellency the Governor of the Commonwealth and to the Honorable Council.

In accordance with the terms of the act establishing this commission (chapter 474 of the Acts of 1907), the Board submits the following report as to the progress of its work : —

In June, 1909, the term of office of Mr. Jeremiah Smith, Jr., a member of this commission, expired. As he was unable to continue a member of the Board, Mr. Arthur Drinkwater was appointed by Governor Draper to fill his place.

The accommodations for patients and for the employees necessary for the care of them are being erected and made ready for occupancy without exceeding the appropriation of \$315,000. Much still remains to be done, however, to make these sanatoria attractive, thoroughly efficient and economical of administration.

It is manifestly important to have the grounds about the buildings attractive, for an important element in promoting the cure of these patients is to keep them cheerful and interested in the outdoor life.

Since the North Reading Sanatorium has been in operation we have found that the patients coming to us expect to sleep and live in the open air. Some of those with advanced disease, in the warm wards, have asked to be moved into the open pavilions. This shows how far the education of the people in regard to the paramount importance of open air has progressed. Light occupation and even work must be supplied to our more vigorous patients in order to keep them in the best condition

possible. Under the watch of the physicians this can be given to the women by letting them do light work in the wards or in the garden and poultry yard. For the men, the light work in the wards, the care of the grounds, light work on the farm, care of stock and driving will furnish outdoor occupations.

Before the next Legislature meets, this commission, under the provisions of section 15, chapter 474 of the Acts of 1907, will assume control as trustees of the Massachusetts State Sanatorium at Rutland, as well as of the three sanatoria now under their charge. This is therefore a fitting time for them to state, as far as they can, their policy as to the admission and apportionment of patients. A statement at this time is called for also by the fact that the fear has been publicly expressed that discrimination will be shown against cities already having sanatoria for the treatment of consumptives. The intention to admit patients in every stage of the disease has also been adversely commented upon, on the ground that incipient cases should not be treated in institutions where advanced cases are received.

We would state, therefore, that there will be no discrimination against any city or town in the State. It is the intention of the commission to admit to the State sanatoria all consumptive patients who are residents in the State and who make proper application. After these patients are under our observation it will be possible to discriminate among them and select the really incipient cases for transfer to the Rutland Sanatorium. Occasions will doubtless arise when incipient or early cases cannot be thus transferred. Some patients who are willing to enter a sanatorium in their immediate neighborhood may not be willing to go to Rutland; others may be debarred from entering Rutland because of noncitizenship; at times the Rutland Sanatorium may be full. When for any of these reasons we are obliged to keep incipient cases at one of the sanatoria where advanced cases are also taken, we feel that we offer them opportunities for recovery vastly better than they would have at home. Our arrangements are such that the early cases do not come in close contact with the advanced cases, and to patients living in the open air day and night the danger of contagion is practically nothing.

As was pointed out in the last report this commission was

empowered to establish dispensaries and to disseminate knowledge about tuberculosis. No appropriation was made, however, for the support of dispensaries nor for the dissemination of knowledge. Approaching this part of its duties the commission felt that for the present at least its efforts should be directed toward encouraging cities, towns and anti-tuberculosis associations to establish dispensaries, day camps and tuberculosis classes. Much has been done in this direction. At the office of the commission data in regard to this sort of work have been collected, and information and advice have been put at the disposal of organizations undertaking these enterprises.

A systematic plan for procuring the publication of appropriate articles on anti-tuberculosis work in various daily and weekly newspapers throughout the State has been successfully carried out. Bulletins prepared by the National Tuberculosis Association upon various phases of the tuberculosis problem have been sent twice a month to 150 newspapers and journals throughout the State, where they have been given wide publication. In this way the people have been kept informed and a public interest has been aroused, which has done much to stimulate local work in various parts of the Commonwealth.

The three superintendents of our hospitals and the secretary of the Board have spoken at many public meetings on tuberculosis. The commission's offices in the Twentieth Century Club building, 3 Joy Street, are becoming more and more a center for information on all that pertains to the tuberculosis problem in this State. Letters and personal visits from all over the country have been frequent. A collection of pamphlets, reprints, bulletins, reports on tuberculosis, is kept at the office, and a wide distribution of these is made. Some 400 letters, containing such material and answers to inquiries of various kinds, have been sent out during the past year. The commission has been provided by private donation with a set of lantern slides and material for lectures on tuberculosis, which have been largely used.

As in the past this commission has been in close touch with the Associated Committees of the Massachusetts Medical Society for the Prevention and Control of Tuberculosis, and acting with these it has been influential in sending the traveling tubercu-

losis exhibit to various cities and towns throughout the State.

During the past year tuberculosis associations or committees have been formed in Adams, Framingham, Gardner, Great Barrington, Hudson, Newburyport, Pittsfield, Quincy and Somerville; day camps have been established at Braintree, Cambridge, Clinton, Springfield and Worcester; clinics for tuberculosis or tuberculosis classes or dispensaries have been formed at Fall River, Fitchburg, Holyoke, Malden, Medford and New Bedford; district nurses have been employed in Adams, Canton, Fall River, Great Barrington and Lowell.

Thus the offices of this commission have been a central point where various anti-tuberculosis agencies of the State have carried on their activities. The Board has co-operated and has been in close touch with other Boards, — the State Board of Health, the State Board of Education, the medical profession of the State, etc. Tuberculosis hospitals, sanatoria, private and public associations, dispensaries and classes send us their reports and information as to all they are doing. It is to be expected that this part of the commission's work will grow in importance and usefulness each year.

It is of the first importance that this work of educating the people should go on without diminution, and that this commission should keep itself informed as to the various local organizations interested in anti-tuberculosis work so that it may help to bring about the fullest co-operation among them.

After the three hospitals in our charge are completed and we have the management of the four State sanatoria, the business of this office will be still further increased. We ask, therefore, for authority to engage offices and such office force as is necessary, and we recommend the passage of the following act: —

AN ACT TO PROVIDE FOR AN OFFICE AND TO DETERMINE A NAME FOR THE BOARD FOR ESTABLISHING THREE SANATORIA FOR TUBERCULAR PATIENTS.

Be it enacted, etc., as follows: —

SECTION 1. The board for establishing three sanatoria for tubercular patients, which board was created by chapter four hundred and seventy-four of the acts of the year nineteen hundred and seven, shall hereafter be known as the Commission on Hospitals for Consumptives.

SECTION 2. The said commission shall have power to establish an office in the state house, or elsewhere in the city of Boston, and employ clerical assistance.

SECTION 3. For the purposes mentioned in the preceding section and for defraying traveling and general expenses of the commission, and the expense of carrying out the powers conferred by section nine of said chapter four hundred and seventy-four of the acts of the year nineteen hundred and seven of establishing out-patient departments and disseminating information as to the best method of combating tuberculosis, suitable appropriation shall be made annually.

SECTION 4. This act shall take effect upon its passage.

Disbursements have been as follows : —

To Nov. 30, 1907 (office),	\$1,093 66	
To Nov. 30, 1908 (office),	3,759 85	
North Reading State Sanatorium, to Nov. 30, 1908,	8,880 30	
Lakeville State Sanatorium, to Nov. 30, 1908,	4,505 63	
Westfield State Sanatorium, to Nov. 30, 1908,	6,240 38	
To Nov. 30, 1909 (office) : —		
Salary of secretary,	\$1,500 00	
Salary of stenographer,	958 33	
Rent of offices,	866 58	
Stationery, office supplies, printing, etc.,	337 12	
Telephone,	98 92	
Press clipping service,	60 00	
Traveling expenses of members of commission,	139 13	
North Reading State Sanatorium,	76,961 23	
Lakeville State Sanatorium,	63,209 98	
Westfield State Sanatorium,	51,581 02	
	<hr/>	195,712 31
		<hr/>
		\$220,192 13
Appropriation,	\$315,000 00	
Disbursements,	220,192 13	
	<hr/>	
Balance,	\$94,807 87	

NORTH READING STATE SANATORIUM.

The construction of this sanatorium has been rapidly pushed forward during the past year. Under the able management of Dr. Ernest B. Emerson, the superintendent, a considerable part of the outside work of installing the water and sewerage systems and the heating and power plants has been done by day labor, and substantial saving of expense has thus been

effected. A more detailed account of this work will be found in Dr. Emerson's report.

At the monthly meeting of the commission, on Sept. 21, 1909, it was voted to inform the Governor of the Commonwealth that the North Reading State Sanatorium was ready to receive patients, and to request him to open the hospital. This vote was transmitted to His Excellency Governor Draper, and on Sept. 22, 1909, he issued the following proclamation : —

The Board appointed by authority of section 1 of chapter 474 of the Acts of the year 1907, to establish three sanatoriums for tubercular patients, having notified me, under the provisions of section 7 of said chapter, as amended by section 2 of chapter 532 of the Acts of 1908, that one of the buildings constructed under the provisions of said chapter 474 of the Acts of 1907, being that constructed in the town of North Reading, is so far completed that in the opinion of said Board it may properly be used for the purposes set forth in said act, — I, therefore, in accordance with said acts proclaim this sanatorium to be now established and ready for the reception of inmates, as provided by law.

(Signed) EBEN S. DRAPER,

Governor of Massachusetts.

BOSTON, Sept. 22, 1909.

Dr. Emerson at once proceeded to assemble his staff of assistant physicians, nurses and other employees. Without delay notices were sent to the patients on the waiting list, and on October 1 they began to arrive at the sanatorium. There are now (November 30) under treatment at this sanatorium 116 patients, of whom 60 are men and 56 are women.

The sanatorium comprises a large administration and domestic building, containing rooms for the superintendent, assistants, nurses, etc., kitchens and dining rooms; two closed wards for patients in advanced stages of the disease and four open pavilions for ambulatory cases. The wards and pavilions face south and are sheltered on the north by a growth of pine trees. The pavilions are so constructed that the sleeping wings can be closed in and heated at small expense in case the proportion of bed cases requiring warm wards is greater than has been anticipated. The buildings are of wood, lighted by electricity, heated by steam and supplied with water from driven wells. The nearest railroad station is North Wilmington, two miles away, while electrics from Andover and Lowell

to the north, and Reading and Boston to the south, pass within ten minutes' walk of the sanatorium.

This sanatorium has been completed in the manner above described without exceeding the \$105,000 provided by chapter 474, Acts of 1907, and chapter 414, Acts of 1909 (Appendix A). The construction is simple but substantial.

In order to accomplish this it has been necessary to exercise the most rigid economy. The amount left for furnishing was only sufficient to supply bed clothing for the time of year when the sanatorium was opened. As the weather became more severe it has been necessary to procure additional blankets. The other furnishings also were limited to what was indispensable, and considerable additions must be made for the comfort of the patients and for efficiency and economy of administration.

In the charges against each sanatorium is one amounting to \$2,937.86 for the expenses of the commission. Of this charge rather more than two-thirds has been spent in "disseminating information as to the best methods of combating the disease" and in bringing about the establishment of dispensaries. In short, these expenses were incurred in carrying out the general State campaign against tuberculosis.

To fairly arrive at the actual expenses of building and fitting out these sanatoria such general expenses of the commission should be deducted.

For purposes of comparison the building expenses of some recent sanatoria are of interest: —

	Cost.	Number of Patients.
Rhode Island State Sanatorium, Wallum Lake,	\$217,000 00	120
Maine State Sanatorium,	160,500 00	100
Boston Municipal Hospital,	233,000 00	80 ¹

LAKEVILLE STATE SANATORIUM.

This institution is rapidly nearing completion. The site is a convenient one, just outside of Middleborough, within easy reach of Taunton, New Bedford, Fall River, Brockton, Attleborough, etc. There are three large buildings, — the

¹ A day camp is also maintained for a certain number of patients.

administration building, containing offices, rooms for the superintendent, assistants and nurses, dining rooms, etc., and two large ward buildings, one for men and one for women. These ward buildings each contain two closed wards for very sick patients and two open wards or pavilions for patients in the earlier stages of the disease. The hospital will probably be ready to receive patients in December of this year.

WESTFIELD STATE SANATORIUM.

The Westfield State Sanatorium will probably be completed early in the spring. The plans call for a group of six buildings, — an administration building, with rooms for the superintendent and assistants; service building, with dining rooms and kitchens, servants' quarters, etc.; two ward buildings for advanced cases and two pavilions for incipient cases. In addition there is already on the property a large four-story barn.

The sanatorium is situated two miles from the center of Westfield and seven miles west from Springfield. An electric car line runs between the two places and passes the sanatorium property within six minutes' walk of the buildings. Trains on the Boston & Albany railroad arrive at Westfield from the west at 10:36 A.M. and 5:20 P.M.; from the east at 11:41 A.M. and 4:31 P.M. Patients coming on one of these trains will be met at the station. The post-office address of patients will be Westfield, Mass., care of the Westfield State Sanatorium.

The search for water at Westfield was a troublesome one. After boring in all the more promising parts of the property in vain, a supply was found in the extreme eastern corner, near a brook coming down from the hills behind. The supply of water here seems to be sufficient, but the State Board of Health, while finding the water suitable at the present time for drinking, questions the desirability of these wells as sources from which to take water for the permanent supply of the institution, and says that if used temporarily the water should be analyzed at frequent intervals in order that its use may be discontinued if deterioration occurs.

The property has been so thoroughly examined for water that we feel that this is our only chance of obtaining a sufficient supply on our own land. The alternative would be to

take water from the Springfield water supply. This main passes the property at about a mile and a quarter distance. Laying a pipe from their main to the property would cost somewhere between \$5,000 and \$7,000.

We are making a further examination of this question and will report further as soon as we have reached a conclusion. This may require a request for an additional appropriation for this work.

Respectfully submitted,

ARTHUR T. CABOT.
CHARLES H. ADAMS.
ALVAH CROCKER.
ARTHUR DRINKWATER.
ALBERT C. GETCHELL.
WILLIAM C. GODFREY.
SYLVIA B. KNOWLTON.
WILLIAM D. McFEE.
CHARLES H. PORTER.

REPORT OF THE NORTH READING STATE SANATORIUM.

Dr. ERNEST B. EMERSON, *Superintendent.*

NORTH READING, MASS.

To the Commission on Hospitals for Consumptives.

GENTLEMEN: — Ground was broken for the construction of the sanatorium at North Reading Oct. 28, 1908, and by proclamation of His Excellency Governor Draper it was opened for patients Sept. 22, 1909.

There have been admitted since the opening of the sanatorium 5 incipient cases, 80 moderately advanced and 64 far-advanced cases of pulmonary tuberculosis. The first patient was admitted Oct. 1, 1909. Most of our patients have shown a cheerful and willing spirit to co-operate with us in their treatment. Considerable doubt has been felt that the sanatorium, constructed as it is, with over half of the beds in open sleeping pavilions, would meet the requirements of a sanatorium for advanced cases. Thus far the majority of our patients, although suffering from a moderately advanced type of the disease, are desirous of sleeping in the open pavilions, and can be cared for in these buildings without much additional work. Many of the far-advanced cases are kept in the wards only under protest. Although the winter is before us, and the cases advanced, I feel that the outlook for treating them in the buildings which we have is most encouraging.

WATER SUPPLY.

Considerable difficulty was experienced in locating a suitable water supply. Numerous test wells were driven on various parts of the farm before a sufficient supply was found. On driving test wells, either a very fine sand which would not allow a flow of water, or ledge was encountered. Late in the spring an area of moderately coarse sand and gravel was located south of the group of buildings, from which we are now drawing a good supply of water. A pump of sufficient size for our present needs, driven by an electric motor, has been

installed. A tank with a capacity of 20,000 gallons stands a few rods to the west of the sanatorium, and hydrants have been placed at suitable intervals. There is a sufficient pressure from the tank to afford protection to our highest roof.

SEWER.

The sewage system was started early in the spring, and was done by men hired by the day, considerably below the estimated cost. The system consists of a main line starting opposite the ward building on the west and running in an easterly direction into a series of cesspools, located some 300 yards east of the buildings.

CONDUIT.

The conduit carrying steam and hot-water pipes to the several buildings, constructed of matched tile laid in cement, was put in by men hired by the day.

IN GENERAL.

Many delays have been encountered throughout the year, chief of which was that connected with the installation of the water system, which delayed the opening of the sanatorium fully six weeks. A driveway has been started leading to the main street, and considerable grading has been done. However, this work makes as yet but small showing. Much of the work about the grounds, I believe, should be done at odd times by our own force of regular employees, when they would otherwise be idle or laid off duty.

APPOINTMENTS.

Dr. Carl C. McCorison, formerly assistant physician at the State Infirmary, has been appointed assistant superintendent. Miss Jane Barker, a graduate of the Children's Hospital, Boston, formerly in charge of the Cambridge Hospital day camp, has been appointed superintendent of nurses and matron. Mr. Edward W. Perry, formerly of the Reading municipal light plant, has been appointed chief engineer.

RECOMMENDATIONS.

The barn, which is somewhat out of repair, is well worth making over, with certain additions which are necessary to

properly care for our teams, and allow us to purchase and store hay, grain and other supplies in much larger quantities. I would recommend that \$8,000 be appropriated for this purpose. I would recommend that an appropriation of \$1,800 be made for the building and equipping of a piggery, and a like amount for the building and equipping of a hennerly. As our buildings are considerably separated from each other I would recommend that an appropriation of \$500 be made for the building of concrete walks. An appropriation of \$2,000 should be made for an additional engine and generator of somewhat larger size than the one now in use, as without doubt within a few years our growth will demand such an outfit, and in the mean time I believe we should be protected against any possible breakdown. At present we are disinfecting the bedding and clothing with chemicals. Although this method is effective, it is expensive and not as satisfactory as a properly constructed steam sterilizer. Nine hundred dollars should be appropriated for the purchase and installation of such apparatus. Five hundred dollars should be appropriated for the building of an incinerator, as at present all sputum and other refuse is being burned under the boilers. Additional furnishings and equipment are needed for the comfort of our patients and for the proper and economical management of the institution. A laboratory, the importance of which cannot be overestimated, should be furnished with the necessary apparatus for carrying on the scientific and research work demanded of every institution of similar character. I would recommend that \$2,500 be appropriated for the above items. We are now paying for the use of a spur track a mile and a half distant and teaming our supplies at a considerable expense. A sum of \$1,000 is needed for the purchase of a narrow strip of land and the building of a side track thereon. An appropriation of \$80,620 will be necessary for the maintenance of the sanatorium for the ensuing year (see Appendix A).

Respectfully submitted,

ERNEST B. EMERSON,

Superintendent.

TREASURER'S REPORT.

To the Commission on Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1909 : —

CASH ACCOUNT.

Receipts.

Institution Receipts.

Board of inmates : —

Private,	\$993 70	
Cities and towns,	103 71	
	<hr/>	\$1,097 41

Salaries, wages and labor : —

Wages not called for,	20 79	
	<hr/>	\$1,118 20

Receipts from Treasury of Commonwealth.

Maintenance appropriations : —

Advance money (\$3,500, less returned, \$1,308.24),	\$2,191 76	
Approved schedules of 1909,	13,654 81	
	<hr/>	15,846 57
Total,		\$16,964 77

Payments.

To treasury of Commonwealth, institution receipts,	\$1,118 20
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Maintenance appropriations : —

Two months' schedules, 1909,	13,654 81	
November advances,	2,191 76	
	<hr/>	
Total,		\$16,964 77

MAINTENANCE.

Appropriation,	\$20,000 00
Expenses (as analyzed below),	19,996 82
	<hr/>
Balance reverting to treasury of Commonwealth,	\$3 18

Analysis of Expenses.

Salaries, wages and labor : —

General administration,	\$1,512 69	
Medical service,	639 74	
Ward service (male),	234 99	
Ward service (female),	480 69	
Repairs and improvements,	82 92	
Farm, stable and grounds,	951 54	
	<hr/>	\$3,902 57

Food : —

Butter,	\$329 23
Beans,	45 30
Bread and crackers,	11 00
	<hr/>

<i>Amounts carried forward,</i>	\$385 53	\$4,288 10
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<i>Amounts brought forward,</i>	\$385 53	\$4,288 10
Food — Concluded.		
Cereals, rice, meal, etc.,	65 50	
Cheese,	24 84	
Eggs,	280 55	
Flour,	1,347 02	
Fish,	65 60	
Fruit (dried and fresh),	160 69	
Meats,	958 94	
Milk,	475 18	
Molasses and syrup,	14 55	
Sugar,	317 99	
Tea, coffee, broma and cocoa,	104 38	
Vegetables,	321 68	
Sundries,	267 17	
		4,789 62
Clothing and materials: —		
Clothing,	\$14 89	
Dry goods for clothing and small wares,	7 73	
		22 62
Furnishings: —		
Beds, bedding, table linen, etc.,	\$2,337 73	
Brushes, brooms,	113 76	
Crockery, glassware, cutlery, etc.,	106 06	
Furniture and upholstery,	174 25	
Kitchen furnishings,	114 03	
Wooden ware, buckets, pails, etc.,	182 81	
Sundries,	51 13	
		3,079 77
Heat, light and power: —		
Coal,	\$2,327 94	
Oil,	38 65	
Sundries,	9 60	
		2,376 19
Repairs and improvements: —		
Cement, lime and plaster,	\$1 50	
Electrical work and supplies,	19 31	
Hardware,	57 85	
Lumber,	74 00	
Paints, oil, glass, etc.,	42 49	
Plumbing, steam fitting and supplies,	223 95	
		419 10
Farm, stable and grounds: —		
Fertilizers, vines, seeds, etc.,	\$221 29	
Hay, grain, etc.,	1,012 58	
Harnesses and repairs,	6 50	
Tools, farm machines, etc.,	47 14	
Sundries,	400 98	
		1,688 49
Miscellaneous: —		
Books, periodicals, etc.,	\$132 26	
Freight, expressage and transportation,	559 25	
Ice,	125 00	
Medicines and hospital supplies,	1,259 84	
Postage,	28 89	
Printing and printing supplies,	199 30	
Soap and laundry supplies,	310 31	
Stationery and office supplies,	232 65	
Travel and expenses (officials),	38 58	
Telephone and telegraph,	22 16	
Cuspidor supplies,	508 00	
Sundries,	302 22	
		3,718 46
Total expenses for maintenance,		\$19,996 82

RESOURCES AND LIABILITIES.

Resources.

November cash vouchers (paid from advance money), . . .	\$2,191 76	
Due from treasury of Commonwealth account November, 1909, schedule,	4,150 28	
	<hr/>	\$6,342 01

Liabilities.

Schedule of November bills,	\$6,342 01
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ERNEST B. EMERSON,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

STATISTICAL TABLES.

Admissions and Discharges.

	Males.	Females.	Totals.
Number of patients admitted Sept. 22 to Nov. 30, 1909, inclusive,	83	66	149
Number discharged Sept. 22 to Nov. 30, 1909, inclusive,	23	10	33
Number of deaths (included in preceding items),	4	2	6
Number remaining in sanatorium Nov. 30, 1909,	60	56	116
Daily average number of patients,	58	44	102

From where admitted.

PLACE.	Num- ber.	PLACE.	Num- ber.	PLACE.	Num- ber.
Amesbury,	1	Hyde Park,	1	Reading,	3
Andover,	2	Ipswich,	1	Revere,	2
Arlington,	4	Lawrence,	5	Salem,	2
Attleborough,	2	Leominster,	1	Sharon,	1
Boston,	13	Lowell,	2	Somerville,	3
Brockton,	11	Lynn,	4	South Sudbury,	1
Brookline,	2	Malden,	2	South Weymouth,	1
Cambridge,	3	Mansfield,	1	Springfield,	6
Campello,	1	Marstons Mills,	1	Stoneham,	1
Canton,	2	Maynard,	1	Taunton,	1
Chelmsford,	1	Medford,	2	Tewksbury,	1
Chelsea,	3	Melrose,	3	Upton,	1
Dedham,	1	Middleborough,	1	Wakefield,	4
East Watertown,	1	Newburyport,	1	Warren,	1
Everett,	3	North Attleborough,	2	Waverley,	1
Fitchburg,	6	Northbridge,	1	Wellesley,	2
Gloucester,	1	Northampton,	1	Westport,	1
Great Barrington,	1	North Weymouth,	1	Whitman,	1
Haverhill,	1	Pittsfield,	1	Winthrop,	1
Hebronville,	1	Plymouth,	1	Woburn,	2
Holliston,	1	Pride's Crossing,	1	Worcester,	9
Holyoke,	6	Quincy,	2	Total,	149
Hopedale,	1				

Age of Patients admitted.

	Males.	Females.	Totals.
1 to 14 years,	1	2	3
14 to 20 years,	6	6	12
20 to 30 years,	30	23	53
30 to 40 years,	27	20	47
40 to 50 years,	14	9	23
Over 50 years,	5	6	11
Totals,	83	66	149

Civil Condition of Patients admitted.

	Males.	Females.	Totals.
Married,	35	31	66
Single,	45	31	76
Widowed,	3	4	7
Divorced,	—	—	—
Totals,	83	66	149

Occupations.

	Males.	Females.		Males.	Females.
Artist,	1	—	Metal polisher,	1	—
Barber,	2	—	Mill operative,	5	5
Boiler maker,	2	—	Milliner,	—	1
Bookkeeper,	—	1	Minister,	1	—
Bottler,	1	—	Newspaper reporter,	1	—
Brakeman,	1	—	No work,	1	—
Cap maker,	—	1	Nurse,	—	1
Carpenter,	2	—	Nurse (trained),	—	1
Clerk,	6	—	Nursemaid,	—	1
Coil winder,	—	1	Painter,	3	—
Comb maker,	1	—	Pedler,	1	—
Domestic,	—	8	Printer,	1	—
Dressmaker,	—	1	Roofer,	1	—
Electrician,	2	—	Salesman,	3	—
Engineer,	1	—	Shipping clerk,	2	—
Fish cutter,	1	—	Shoe factory operative,	3	4
Gardener,	2	—	Shoemaker,	6	—
Housewife,	—	34	Stenographer,	1	—
Ice man,	1	—	Student,	4	5
Jeweler,	3	—	Tailor,	1	—
Journalist,	1	—	Teacher,	1	2
Laborer,	12	—	Teamster,	1	—
Machinist,	5	—	Tinsmith,	1	—
Mattress maker,	1	—	Totals,	83	66

Nativity and Parentage of Patients.

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patients.	Father.	Mother.	Patients.	Father.	Mother.	Patients.	Father.	Mother.
United States:—									
Massachusetts,	32	10	10	21	9	10	53	19	20
Other New England States,	8	8	8	5	7	6	13	15	14
Other States,	3	2	1	6	3	3	9	5	4
Total native,	43	20	19	32	19	19	75	39	38
Other countries:—									
Canada,	6	11	11	11	12	12	17	23	23
England,	7	9	9	3	5	3	10	14	12
Finland,	-	-	-	1	1	1	1	1	1
Germany,	1	2	2	-	-	-	1	2	2
Greece,	-	-	-	1	1	1	1	1	1
Ireland,	8	20	20	6	11	14	14	31	34
Italy,	-	-	-	1	1	1	1	1	1
Norway,	-	-	-	1	1	-	1	1	-
Portugal,	-	-	-	-	1	1	-	1	1
Russia,	7	9	9	8	10	10	15	19	19
Scotland,	-	-	-	1	2	1	1	2	1
Sweden,	7	7	7	1	1	2	8	8	9
Turkey,	3	3	3	-	-	-	3	3	3
Western Islands,	-	1	1	-	-	-	-	1	1
Total foreign,	39	62	62	34	46	46	73	108	108
Unknown,	1	1	2	-	1	1	1	2	3
Totals,	83	83	83	66	66	66	149	149	149

Deaths, Duration of Disease, Length of Stay in Sanatorium and Cause of Death.

Sex.	Duration.	Stay.	Cause of Death.
Male,	About 2½ years, . . .	1 month 8 days, . . .	Phthisis.
Male,	About 1 year, . . .	27 days, . . .	Phthisis.
Male,	About 2½ years, . . .	21 days, . . .	Phthisis.
Male,	About 2½ years, . . .	9 days, . . .	Phthisis.
Female,	About 1½ years, . . .	1 month 18 days, . . .	Phthisis.
Female,	About 3 years, . . .	1 month 3 days, . . .	Phthisis.

REPORT OF THE LAKEVILLE STATE SANATORIUM.

Dr. SUMNER COOLIDGE, *Superintendent.*

LAKEVILLE, MASS.

To the Commission on Hospitals for Consumptives.

GENTLEMEN :— Since building operations were begun, in February, the work has progressed consistently for the most part, the failure to complete the buildings on schedule time being due to frequent delinquencies of subcontractors and delays in the receipt of material. It is hoped that the buildings will be ready for occupancy about December 15.

Since June 1 the superintendent has lived at the sanatorium and has had personal supervision of the entire work. A small force of men and three horses have been kept busy during that time on work which it was thought could be done most economically by the day. In this way the steam conduit, electric duct, cesspools and drains have been completed, as well as the digging for the water system, the rough grading, the beginning of a macadamized avenue, the entire supply of sand and gravel for plastering and granolithic floors, and, since November 1, the carting of material from the cars to the buildings. For all work done for contractors allowance is made equivalent to the ruling price for such labor in this vicinity, so that by timely co-operation with the contract work a substantial saving to the Commonwealth in time and money has been accomplished.

The site selected for this institution possesses to a considerable degree many of the requirements for an ideal tuberculosis sanatorium. The elevation, soil, southerly exposure and accessibility are exceptional for this part of the State, and there is a fair stand of young forest trees, but there our available natural assets end. The property has not been productive for many years. Although it contains very good land for vegetable farming, it is still in the rough and can be brought into cultivation but slowly.

The buildings are arranged to care for 48 patients in shacks, 50 in wards slightly warmed, 40 in warm wards and 12 in small rooms, and it is hoped that each patient assigned to this sanatorium may be placed in the conditions best suited to his case. The buildings contain also comfortable quarters for 56 employees, besides the superintendent's family.

The buildings have been completed and made ready for patients within the appropriation, but \$5,000 more will be necessary to complete the furnishings and equipment of the kitchen, laundry, laboratory, etc.

HEATING AND POWER PLANT.

The power plant promises very satisfactory results although it cannot be considered complete until a duplicate generating set is installed. From the boiler room a low-pressure main for heating the buildings and a high-pressure main for cooking and heating water extend to the center of the women's ward, a distance of about 800 feet. The electric wires between the power house and the buildings (800 feet) are under ground, and a pole line carries current about 500 feet to a five horse-power motor at the wells. The laundry machinery, which is in a room adjacent to the engine room, is driven by a seven and one-half horse-power motor. The buildings will be heated by the exhaust from the engine, supplemented by direct steam when necessary.

GROUNDS.

Much time and labor will be necessary to finish the clearing and grading about the buildings, and completing the walks and driveway, but this may be done gradually by the farm help if a small appropriation can be obtained at once for board walks. We have already a goodly stock of hardy plants and shrubs which have been propagated this season.

WATER SUPPLY.

With considerable difficulty a water supply has been secured from driven wells. Although ground water stands only 12 or 13 feet below the surface, and in sufficient quantity, the formation is so fine in many places that the flow of water is too slow to make a well. Twelve wells were driven, of which five have

been connected with a motor-driven pump, and since early August have supplied water to the contractors for the brickwork, plastering, granolithic floors, etc. The yield is 50 gallons per minute, and the quality is reported by the State Board of Health to be excellent. A storage tank of 20,000 gallons capacity gives satisfactory pressure in all the buildings.

We have, then, a group of commodious buildings for the care of the sick and the comfort of the employees, on a very satisfactory site, but without many of the concomitants which would make our establishment practical, economical, and complete.

BARN.

The sanatorium horses have been stabled up to this time on a small farm, which has been rented at \$300 per year solely for stable accommodations. This farm afforded the only barn in the vicinity available for our use, and as its appointments are entirely inadequate for the proper protection of horses, harnesses, tools, carriages and wagons, it is hoped that a new barn may be authorized this year. This farm has yielded us 7 tons of hay and 100 bushels of potatoes this season.

OLD HOUSE.

The old house that was on the property has been examined by an architect and a builder, who agree that it is a fine specimen of the old style of architecture and well worth saving. Being a double house, the expenditure of a small sum of money would afford two excellent tenements for married employees, besides several rooms for single men. Lakeville being a large town whose small population is widely scattered, it is difficult to find houses to rent, so that our married employees will be obliged to locate out of town if we do not utilize this old house. Indeed, it would seem advisable to also build a modest cottage in connection with the stable, the rental of which would enable us to retain the services of a good man for comparatively low wages.

HENHOUSE.

The location of this sanatorium is most favorable for the production of eggs and poultry, and as much of the waste from the kitchen and dining rooms makes excellent poultry food, it is highly practicable to undertake the home production of so

important a factor in the diet of our patients. The plant should be complete, with facilities for cooking the food and for hatching and housing the young chicks.

GENERATOR.

Our power plant is deficient in that we have no duplicate generating set to fall back upon in case of a breakdown of the one now in operation. Situated as we are, beyond the reach of any outside help in electric light and power, a breakdown of our present plant, however slight, would have serious results, as it would cut off our lights, our water supply and power for the laundry. It is recommended that a 25 kilowatt generating set be purchased this year, to secure us against a disastrous breakdown.

REFRIGERATING PLANT.

The question of ice supply in the Cape district presents a problem of considerable importance. In this immediate vicinity ice is seldom harvested more than 6 or 8 inches thick, and frequently the winters are so mild that little or no ice is cut. During the summer just passed the price of ice in Middleborough and Lakeville has been 50 cents per hundredweight. The local supply is cut from small ponds, or, in case of failure of the local crop, is brought from a distance at great expense. In either case the purity of the ice for hospital use may well be questioned. In such conditions it is highly important that the sanatorium should have full control of the purity and quantity of its own supply. To this end it is urgently recommended that an automatic refrigerating plant be installed, of a size equivalent to the melting of about two tons of ice, and with a capacity for making 400 or 500 pounds of artificial ice daily.

Until the sanatorium is in operation and the patients properly classified there is no reason to greatly modify the estimate of cost of maintenance as reported last year, which was based upon the assumption that we shall admit a large proportion of advanced cases (see Appendix B).

Respectfully submitted,

SUMNER COOLIDGE,

Superintendent.

REPORT OF THE WESTFIELD STATE SANATORIUM.

Dr. HENRY D. CHADWICK, *Superintendent*.

WESTFIELD, MASS.

To the Commission on Hospitals for Consumptives.

GENTLEMEN :— The general contract for construction was signed June 12, 1909. Work since has gone on without interruption. Unfortunately, ledge was encountered while excavating for two of the buildings, and about 300 cubic yards of rock had to be removed, which has made considerable additional expense. Unless some unforeseen delay occurs, the contractor will complete his work about the first of January, which is about three weeks later than the contract called for.

The group of buildings consists of an administration building, which occupies the front and center, the service building in the rear, one ward and one shack on the west side for women patients and duplicates of these two buildings on the east side for men patients. All of the buildings front to the south. The closed ward is intended to be used for patients having more advanced disease. All portions of this building can be heated. It is so arranged that there is a door between each two beds opening on a wide porch which runs along the length of both sides of the ward. Bed patients will be kept in the open air on these porches both day and night, except at such times as their condition or inclement weather makes it undesirable. There are also six private rooms in each of the closed wards, to be used for very sick persons requiring special nursing and seclusion. Beds for 47 patients are provided for in each of these wards. The shacks are unheated in the sleeping portion and therefore must be occupied by early-stage cases, who are able to care for themselves without much attention from nurses. Beds for 28 patients are provided for in each shack. The total capacity of the sanatorium is planned, therefore, to provide for 75 men and 75 women, divided as follows: 56 early-

stage cases in shacks, 82 moderately advanced cases in warm wards and 12 far-advanced cases in warm rooms.

The superintendent's family, the assistant physicians, nurses and office employees will have rooms in the administration building. In the annex to the service building there are rooms for 16 men and 16 women. Thus provision is made for 57 employees besides the superintendent's family.

Since the first of April I have lived in the farmhouse on the property. This was necessary in order to have constant supervision over the construction work. The house, which had been unoccupied for some months, was in a very dilapidated condition and badly out of repair. The interior of the house has been papered and painted and some repairs made. The expense of these changes has been \$285.63.

It was found that we could do the trenching for the water and steam pipes and install the sewage disposal plant by day labor much cheaper than by contract. A marked saving has also been made by erecting the water tower and tank in the same way. Considerable grading and trucking have been done by our own horses, and in addition quite a good sum has been earned by carting labor and supplies for the building and heating contractors.

WATER SUPPLY.

Only after driving many test wells in different parts of the farm was water found in sufficient quantity to supply our needs. Finally water was located about 600 feet east of the buildings. Five wells were then driven and a pumping test recently made, which shows sufficient water for our present needs. This water will be pumped by electric motor into the water main supplying the buildings; the surplus will go into a tank of 20,000 gallons' capacity, which is elevated to give sufficient pressure to throw water over the highest roof. This will give some fire protection, as a hydrant is placed in front and behind the buildings. Chemical fire extinguishers will be placed on each floor of all buildings for additional protection. Water pipes have been laid connecting the farmhouse and barn with the sanatorium supply.

SEWAGE DISPOSAL.

A filter bed 150 feet square has been constructed about 800 feet west of the buildings. The soil under the loam which was removed is sandy and should be good filtering material. The sewer main ends in a concrete tank 24 feet by 8 feet by 9 feet, which when full empties itself automatically on the filter bed. This bed is divided into four equal parts by dikes, and is so arranged that the sewage can be turned from one section to another at will.

POWER AND HEATING.

Two fifty horse-power high-pressure boilers will furnish steam for heating the buildings, the hot-water system, the laundry, and for the steam cookers in the kitchen.

A 35 kilowatt steam turbine and generator will furnish lighting for the buildings, power to run the laundry machinery and to pump the water.

This equipment to be complete needs a duplicate generating set. Any mishap or needed repairs to our generator would leave us without lights, stop the laundry machinery, and, most serious of all, leave us without power to pump the water for the usual needs and for fire emergencies.

GROUNDS.

In order to get the proper floor grade it was necessary for the contractor to do a large amount of excavating for two of the buildings. This left high banks of earth around sections of these wards, which in places were 10 feet high. Some of this, which was close to the buildings, has already been removed by our own teams. Measurements show that nearly 2,500 cubic yards of earth remain, which will have to be removed in order to get a proper grade about the buildings.

Roads will have to be built next spring, one in front of the buildings and another from the highway to the rear of the service building, for the cartage of coal and supplies.

BARN.

There is a large barn on the property, 117 feet by 50 feet, and four stories high, including basement. This was built

about thirty years ago. Few, if any, repairs have been made on it in the mean time. The frame is in excellent condition. The roof will not need shingling for two or three years. I have gone over the matter of alterations and repairs with a carpenter, and estimated the cost of such changes as seem desirable. These, if made, would give us a very good barn, one in which 100 tons of hay could be stored, 40 cows could be kept, a good horse stable and plenty of carriage and store room provided. This year 45 tons of hay were cut on the farm, notwithstanding twenty acres of the best grass land were under cultivation last year and not seeded to grass in the fall.

Proposed Repairs and Alterations.

Convert basement, now used for manure cellar and horse stalls, into a cow stable and milk room adjoining. To do this it will be necessary to concrete the floor and sheathe the walls and ceiling. It is proposed to build a manure shed on the outside of barn and a silo on the west side of the barn, also to convert the east end of second story, an area 54 feet by 50 feet, into a horse stable, carriage and harness room. It is proposed to concrete the floor and sheathe the walls and ceiling. The harness room should be heated in order to keep the robes and harnesses in good condition, and therefore it would be necessary to build a chimney. The outside of the barn should be clapboarded and painted in order to preserve it and improve its appearance. Total estimated expense of above-mentioned items, \$2,000.

FARMHOUSE.

This is a story and a half house with seven rooms. The repairs already done have made the house very comfortable, except that plumbing has never been installed. Bath and toilet fixtures should be put in. The outside of the house needs to be clapboarded and painted and a new piazza built in place of the old one, which is beyond repair. Five hundred dollars would make all these changes and provide us with a farmhouse which would serve very well for the farm foreman and some of the hands.

PIGGERY.

It has been shown in other sanatoria that the table refuse can be more profitably utilized by feeding it to hogs than in any other way. All food which has been once served on the patients' table has to be thrown into the garbage barrel. As this is infected material it must be boiled before being fed to animals. When so disinfected it is perfectly safe to feed to hogs and they thrive remarkably well on it. Judging from experience in other similar institutions we could feed 150 swine on the sanatorium garbage and farm products without having to buy any grain. We have available land at a sufficient distance from our buildings and from neighboring houses where a piggery could be erected. A plan for a building 100 feet by 24 feet, well ventilated and drained, with a cook house in one end, was submitted to a builder for an estimate of cost. This he figured would be \$1,800 with equipment.

HENHOUSE.

I should like to build colony houses to accommodate 1,000 fowls. These could be largely cared for by patients. Aside from the eggs produced it is very desirable to buy our table poultry alive when opportunity offers and kill them as needed. This is economical, and in addition will provide fresh-killed poultry, which is much appreciated by patients. Cold-storage poultry is less nutritious and often unpalatable.

ARTIFICIAL ICE PLANT.

It would be much more economical for us to have an artificial ice plant, as otherwise we would have to harvest our ice two miles from the sanatorium and build an ice house in which to store it. An artificial ice plant which will produce the equivalent of 2 tons of ice and make 250 pounds of ice daily, an electric motor for power and refrigerator rooms of sufficient size in the basement, and a small one in the kitchen, can be installed for \$2,500. Our present power plant will generate sufficient electricity, and the expense of this additional power will not equal the cost of handling ice.

LAUNDRY.

Owing to lack of sufficient money the laundry is inadequately equipped with machinery to do the work in an economical way. We have no machinery to do starch work, and that will mean sending it out to public laundries or hiring more help to do it by hand. This is slow and therefore a more expensive method. A metallic dry room is also greatly needed.

FURNISHINGS AND EQUIPMENT.

The amount of money available from this appropriation is barely enough to equip the buildings in the most meager way. It will be necessary to buy more furniture and bedding. More equipment is needed in the kitchen, laundry and dining room. We should also have a well-equipped laboratory. At least \$5,000 more will be needed for additional equipment and furnishings (see Appendix C).

Respectfully submitted,

HENRY D. CHADWICK,

Superintendent.

APPENDIX.

APPENDIX A.

NORTH READING STATE SANATORIUM.

Estimate for Maintenance.

Salaries, wages and labor:—

Superintendent (per year), . . .	\$2,500 00	
Assistant superintendent (per year), . .	1,200 00	
Assistant physician (per year), . . .	720 00	
Superintendent of nurses and matron (per year),	800 00	
Chief engineer (per year), . . .	1,000 00	
Head cook and baker (per month), . .	58 33	
Assistant cooks (per month), . . .	30 00	
Domestics (per year),	18 00 to \$20 00	
Graduated nurses (per month), . . .	35 00	
Attendants and orderlies (per month), .	20 00 to \$30 00	
Head bookkeeper (per month), . . .	45 00	
Stenographer (per month),	30 00	
Stable men and teamsters (per month),	30 00	
Laborers (per month),	30 00	
Laundry help (per month),	30 00	
Assistant engineers (per month), . . .	60 00	
Foreman (per month),	50 00	
Carpenter and painter (per month), .	60 00	
	<hr/>	\$26,620 00
Food,		31,000 00
Clothing and materials,		2,000 00
Furnishings,		2,000 00
Heat, light and power:—		
Coal,	\$5,500 00	
Sundries,	500 00	
	<hr/>	6,000 00
Repairs and improvements (materials and labor not on pay roll),		2,000 00
Farm, stable and grounds:—		
Board of horses,	\$900 00	
Blacksmithing and repairs,	300 00	
Seed and fertilizer,	500 00	
Sundries,	300 00	
	<hr/>	2,000 00
<i>Amount carried forward,</i>		<hr/> \$71,620 00

Amount brought forward, \$71,620 00

Miscellaneous : —

Soap and laundry supplies,	\$1,200 00
Medicine and hospital supplies,	2,000 00
Stationery, postage and printing,	1,200 00
Cuspidor supplies,	1,500 00
Chapel services and entertainment,	300 00
Telephone and telegraph service,	300 00
Traveling expenses (officials),	300 00
Books, magazines and periodicals,	500 00
Freight and express charges,	1,000 00
Sundries,	700 00
	<hr/>
	9,000 00
	<hr/>
	\$80,620 00

New Construction, Repairs and Equipment.

Repairs and additions to barn,	\$8,000 00
Hennerly,	1,800 00
Piggery,	1,800 00
Concrete walks,	500 00
Duplicate engine and generator,	2,000 00
Sterilizer,	900 00
Incinerator,	500 00
Purchase of land and spur track,	1,000 00
Furnishings and equipment,	2,500 00
	<hr/>
	\$19,000 00

Appropriation, \$105,000.

Payments : —

Land, surveys, etc.,	\$6,711 95
Builders' contract, with deductions,	42,710 42
Power plant equipment and steamfitting,	8,562 84
Water supply,	3,932 64
Grading,	300 00
Plumbing,	3,674 05
Laundry equipment,	1,276 77
Electric lighting and fixtures,	1,565 78
Architect's commission,	2,809 12
Superintendent's salary,	2,916 67
Superintendent's expenses,	525 77
Furnishings,	7,091 26
Miscellaneous,	716 59
	<hr/>
<i>Amount carried forward,</i>	\$82,793 86

Amount brought forward,	\$82,793 86
Sewer,	791 32
Expenses of commission,	2,937 86
Horses, wagons, tools, etc.,	2,256 35
	<hr/>
	\$88,779 39
Additional liabilities,	14,622 89
	<hr/>
	\$103,402 28
Appropriation,	\$105,000 00
Payments and liabilities,	103,402 28
	<hr/>
Balance,	\$1,597 72

APPENDIX B.

LAKEVILLE STATE SANATORIUM.

Estimate for Maintenance.

Salaries, wages and labor,	\$29,720 00
Food,	31,200 00
Clothing and clothing materials,	3,000 00
Furnishings,	2,000 00
Heat, light and power,	6,000 00
Repairs and improvements,	2,000 00
Farm, stable and grounds,	2,000 00
Miscellaneous,	9,000 00
	<hr/>
	\$84,920 00

The basis of this estimate is as follows : —

Salaries, wages and labor : —	Month.	Total per Month.
Superintendent,	\$208 33	\$208 33
First assistant,	100 00	100 00
Second assistant,	60 00	60 00
Third assistant,	50 00	50 00
Supervisor of nurses,	45 00	45 00
Graduate nurses (6),	35 00	210 00
Attendants (13),	25 00	325 00
Orderlies (4),	30 00	120 00
Matron, housekeeper and dietitian,	60 00	60 00
Chief cook,	75 00	75 00
Baker,	60 00	60 00
Assistant cooks (3),	40 00	120 00
Domestics (10),	20 00	200 00
Chief engineer,	83 33	83 33
Assistant engineers (3),	60 00	180 00
Steward,	100 00	100 00
Treasurer's clerk,	55 00	55 00
General helper,	40 00	40 00
Farm foreman,	65 00	65 00
Laborers (5),	30 00	150 00
Laundry man,	35 00	35 00
Laundry women (3),	25 00	75 00
Carpenter and painter,	60 00	60 00
		<hr/>
Total per month,		\$2,476 66
Total per year,		\$29,720 00

Food: —

150 patients, at \$4 per week,	\$31,200 00
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Clothing and clothing materials, ¹	3,000 00
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Furnishings,	2,000 00
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Heat, light and power: —

Coal, bituminous, 1,000 tons, at \$4.50,	\$4,500 00
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Coal, anthracite, 150 tons, at \$7,	1,050 00
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Oil, waste, packing, wood and sundries,	450 00
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6,000 00

Repairs and improvements: —

Cement, lumber, paint, oil, glass, electric work and supplies, hardware, mechanics' labor not on pay roll, plumbing, steam fitting and supplies,	2,000 00
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Farm, stable and grounds: —

Horses (5, at \$16 per month each),	\$960 00
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Blacksmith,	100 00
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Fertilizer and seed,	400 00
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Carriage and wagon repairs,	100 00
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Harness repairs,	50 00
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Labor not on pay roll,	100 00
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Tools and farming implements,	250 00
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Sundries,	40 00
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2,000 00

Miscellaneous: —

Soap and laundry supplies,	\$1,000 00
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Medicine and hospital supplies,	2,000 00
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Stationery and office supplies,	250 00
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Postage,	350 00
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Printing and printing supplies,	500 00
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Cuspidor supplies,	1,400 00
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Chapel services and entertainment	250 00
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Telephone and telegraph service,	350 00
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Traveling expenses (officials),	300 00
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Ice,	1,200 00
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Books, magazines and periodicals,	100 00
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Freight and express charges,	800 00
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Sundries,	500 00
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9,000 00

¹ Inasmuch as a large proportion of patients admitted to the new sanatoria are charity cases, a special appropriation for providing warm clothing is desirable.

New Construction, Repairs and Equipment.

New barn, with quarters for farm help,	\$12,200 00
Repairs on old house,	1,800 00
Poultry houses and poultry,	1,800 00
Duplicate generating set,	1,500 00
Refrigerating machine,	2,500 00
Incinerator,	500 00
Plank or gravel walks,	500 00
Screens,	1,000 00
Furnishings and equipment,	5,000 00
	<hr/>
	\$26,800 00

Appropriation, \$105,000.

Payments: —

Land surveys, etc.,	\$4,735 81
Builders' contract, with deductions,	38,702 17
Power plant equipment and steam fitting,	8,078 17
Water supply,	2,972 66
Grading and building driveway,	698 57
Plumbing,	1,248 00
Laundry equipment,	300 00
Electric lighting and fixtures,	999 17
Architect's commission,	2,429 87
Superintendent's salary,	2,590 28
Superintendent's expenses,	502 10
Furnishings,	523 51
Miscellaneous,	759 65
Sewer,	145 30
Expenses of commission,	2,937 86
Horses, wagons, etc.,	2,499 30
Draining pond,	324 31
Tools,	206 74
	<hr/>
	\$70,653 47
Additional liabilities,	28,864 17
	<hr/>
	\$99,517 64
Appropriation,	\$105,000 00
Payments and liabilities,	99,517 64
	<hr/>
Balance for furnishings, commission's expenses, etc.,	\$5,482 36

APPENDIX C.

WESTFIELD STATE SANATORIUM.

Estimate for Maintenance.

Salaries, wages and labor: —

Superintendent (per year),	\$2,500 00	
Assistant superintendent (per year),	1,200 00	
Assistant physician (per year),	720 00	
Third assistant physician (per year),	600 00	
Steward (per year),	1,200 00	
Superintendent of nurses and matron (per year),	900 00	
Chief engineer (per year),	1,000 00	
Chief cook (per month),	75 00	
Baker (per month),	60 00	
Assistant cooks (2, at \$40 per month),	80 00	
Domestics (10, at \$20 per month),	200 00	
Graduation nurses (6, at \$35 per month),	210 00	
Attendants and orderlies (14, at \$30 per month),	420 00	
Head bookkeeper (per month),	45 00	
Stenographer (per month),	40 00	
Stablemen and teamsters (3, at \$30 per month),	90 00	
Laborers (5, at \$30 per month),	150 00	
Laundry help (4, at \$30 per month),	120 00	
Assistant engineers (3, at \$60 per month),	180 00	
Foreman (per month),	75 00	
	<hr/>	\$29,060 00
Food,		31,000 00
Clothing and materials,		3,000 00
Furnishings,		2,000 00
Heat, light and power: —		
Coal,	\$5,500 00	
Sundries,	500 00	
	<hr/>	6,000 00
		<hr/>
Amount carried forward,		\$71,060 00

Amount brought forward,	\$71,060 00
Repairs and improvements (material and labor not on pay roll),	2,000 00
Farm, stable and grounds:—	
Board of horses,	\$900 00
Blacksmithing and repairs,	300 00
Seed and fertilizer,	500 00
Sundries,	300 00
	<hr/> 2,000 00
Miscellaneous:—	
Soap and laundry supplies,	\$1,000 00
Medicine and hospital supplies,	2,000 00
Stationery and office supplies,	250 00
Postage,	350 00
Printing and printing supplies,	500 00
Cuspidor supplies,	1,400 00
Chapel services and entertainments,	250 00
Telephone and telegraph service,	350 00
Traveling expenses (officials),	300 00
Ice,	1,200 00
Books, magazines and periodicals,	100 00
Freight and express charges,	800 00
Sundries,	500 00
	<hr/> 9,000 00
	<hr/> \$84,060 00

New Construction, Repairs and Equipment.

Grading and roads,	\$2,500 00
Alterations and repairs to barn,	2,000 00
Repairs to farmhouse,	500 00
Piggery,	1,800 00
Poultry houses and poultry,	1,800 00
Artificial ice plant,	2,500 00
Duplicate generator set,	1,500 00
Coal bunker adjoining boiler room,	200 00
Farm implements,	300 00
Incinerator,	500 00
Covered corridor between administration and service building, and plank or gravel walks between the shacks and wards,	450 00
Live stock needed: —	
50 hogs, at \$7 each,	350 00
40 cows, at \$65 each,	2,600 00
Screens for buildings,	1,000 00
Furnishings and equipment,	5,000 00
	<hr/>
	\$23,000 00

Appropriation, \$105,000.

Payments : —

Land, surveys, etc.,	\$6,537 48
Builders' contract, with deductions,	34,963 92
Power plant equipment and steam fitting,	3,366 70
Water supply,	2,391 81
Grading,	575 00
Plumbing,	1,700 00
Architect's and engineer's commissions,	1,800 00
Superintendent's salary,	1,720 42
Superintendent's expenses,	998 59
Furnishings,	278 81
Sewer,	803 76
Miscellaneous,	485 38
Expenses of commission,	2,937 87
Horses, wagons, etc.,	1,646 88
Tools,	250 00
Repair of house on property for superintendent,	302 65
	<hr/>
	\$60,759 27
Additional liabilities,	36,648 74
	<hr/>
	\$97,408 01
Appropriation,	\$105,000 00
Payments and liabilities,	97,408 01
	<hr/>
Balance for furnishings, commission's expenses, etc.,	\$7,591 99

FOURTH ANNUAL REPORT

OF THE

TRUSTEES OF MASSACHUSETTS HOSPITALS

FOR CONSUMPTIVES.

NOVEMBER 30, 1910.



BOSTON:

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TRUSTEES.

ARTHUR T. CABOT, M.D., *Chairman.*

ARTHUR DRINKWATER.

WILLIAM C. GODFREY.

GEORGE A. DUNN.

SYLVIA B. KNOWLTON.

ALBERT C. GETCHELL, M.D.

WILLIAM D. McFEE, M.D.

JOHN B. HAWES, 2d, M.D., *Secretary.*

3 JOY STREET, BOSTON.

The Commonwealth of Massachusetts.

REPORT OF THE TRUSTEES OF MASSACHUSETTS HOSPITALS FOR CONSUMPTIVES.

*To His Excellency the Governor of the Commonwealth and to the
Honorable Council.*

In accordance with the terms of the act establishing this Board (chapter 474 of the Acts of 1907) the Board submits the following report:—

On Feb. 6, 1910, the Westfield State Sanatorium, the last of the three institutions authorized under the terms of this act, was completed. Section 15 of this act provides that, “upon the completion of the sanatoriums as herein provided, the trustees shall assume and exercise all the powers and duties in respect to the sanatorium at Rutland now pertaining to the trustees of that institution, and upon such completion, the powers of the said last named trustees, in respect to the said sanatorium, shall cease.” In accordance with this act, therefore, upon the completion of the Westfield State Sanatorium the former Board of Trustees of the Rutland State Sanatorium ceased to exist, and the administration of that institution was transferred to this Board.

This act (chapter 474, Acts of 1907) also states that “when the said sanatoriums have been completed, and the governor has issued a proclamation declaring them ready for the admission of patients as hereinafter provided, the representatives of the board of charity, and of the board of health designated above, shall cease to act, and the administration of the three sanatoriums shall be vested in the remaining seven, who shall act as a board of trustees.” In accordance with the act, therefore, the terms of office of Mr. Charles H. Adams of the State Board

of Charity and of Mr. Charles H. Porter of the State Board of Health expired, and they ceased to be members of the Board.

In January, 1910, Mr. Alvah Crocker of Fitchburg resigned from the Board and Mr. George A. Dunn of Gardner was appointed by Governor Draper to take his place. In June, 1910, Mrs. Sylvia B. Knowlton was reappointed a member of the Board.

Within a few weeks after the official opening of each sanatorium the full quota of patients was reached, and there is now a long waiting list for each institution. The average of this list for the last six months has been about 130 men and 45 women. At times the waiting list has been larger than this, although the proportion of men to women has remained about the same. The average length of stay of patients at the three new sanatoria is about three months. A man applying for admission is obliged to wait nearly four weeks before his name can be reached, and a woman two weeks.

It is the intention of the Board to keep patients at these institutions until they are either cured of the disease, or its progress sufficiently arrested to permit of their going home and returning to their work, or until death has occurred. Although this is the policy of the Board, and the superintendents make every effort to keep patients in the institutions, there is a considerable number in the advanced and therefore the most infectious and dangerous stages of the disease who, when it is evident that their condition is constantly growing worse, are taken home by their friends and relative to die. There are also many patients in the earlier stages of the disease who feel that they must return to their work and support their families, and who, therefore, leave the sanatoria before the disease is arrested or cured. On the other hand, the number of patients who have shown improvement is gratifying. Although the great majority of those admitted are in the moderately advanced or advanced stages of the disease, many patients have been discharged with the disease arrested, and a few who entered in the advanced stages have been returned to comparative health.

As the sanatorium grounds are made more attractive, and recreation pavilions and other arrangements for the amusement

and occupation of patients are provided, it will be easier to hold patients for a longer time. That this is already being brought about is shown by the fact that many of the patients expect to stay during the entire winter, or until cured.

REGULATION OF WORK.

Many of the patients at the sanatoria are too weak to move about. Their disease is in an active stage and they are feverish, and for them the important thing is to rest, and if possible to recover enough strength to throw off the disease. For such patients the sanatoria afford the opportunity to take this needed rest under favorable conditions in the fresh air. Other patients have considerable strength and are not feverish. For them the problem is to supply a healthy mode of life in the open air. They do not require absolute rest; indeed, complete inactivity is harmful to them, for while they gain flesh they do not gain the strength that enables them to bear fatigue. Such patients, treated by rest alone, when they leave the sanatoria to resume their ordinary modes of life are apt to lose all the advantage they have gained, and suffer a relapse of their disease.

It is important for these patients to have sufficient regulated exercise to improve their muscular power and to fit them to resume their ordinary occupations when they return to their homes. It also promotes their cure and improves their general condition of health to give them some regular occupation, graduated to the strength of the individual patient,—an occupation that will exercise their minds as well as their muscles. Complete idleness is not a healthy state; it is recognized that every sanatorium should supply some occupation for the patients committed to its charge.

It is our aim to meet this requirement in the sanatoria under our supervision, and to provide for our patients some light work prescribed by the physician and carefully graduated to the strength of the individual patient. We are meeting with some resistance to this plan on the part of the patients, some of them objecting because they have been led to believe that complete rest is the *sine qua non* of treatment in all cases, and some because they simply object to work, and feel that their payment

of \$4 a week to the sanatorium entitles them to a life of leisure there.

Both of these objections are due to false conceptions and misunderstandings and are gradually being overcome. It is obviously absurd to regard the relations of a patient to the sanatorium as those of a boarder to the summer hotel.

The work prescribed for patients is prescribed for their own good; it is important, in order that the sanatoria may accomplish their best results, that the system of work be cheerfully accepted and carried out. The right-minded patient should feel pleased if the small task which affords him healthful exercise and occupation makes some slight return to the State for its care of him, and perhaps assists in the preparation of a croquet ground, a lawn or flower bed, to make the place more attractive for those who are to come after him. In some instances a stay in a sanatorium gives opportunity for a patient who has always worked indoors to acquire some skill in outdoor pursuits, which will enable him to find healthful and remunerative occupation after the disease is arrested.

In every sanatorium we have ex-patients on our pay roll, and we may expect in future to secure many permanent employees among those who have learned their duties while assisting as patients in the institution. We have now at the four State sanatoria over 100 ex-patients on the pay roll. Ex-patients thus employed continue to be under the observation of the physicians; they live hygienically and do their work in the open air, thus guarding in the fullest degree against relapse. Such employment of ex-patients in the sanatoria is a not inconsiderable contribution to the solution of the problem of how to obtain work for arrested cases. It is carrying on, in the most efficient and practical way possible, a farm colony for discharged patients, without any extra expense to the State.

SEPARATION OF THE SEXES.

The Board of Trustees is of the opinion that it is unwise to treat patients of both sexes in the same institution. The arguments for a separation of the sexes are as follows:—

1. Such an arrangement would do away with opportunity for scandals likely to arise in mixed hospitals, where many of

the patients are comparatively well. Such scandals have arisen in the past, and, despite constant watchfulness, are apt to arise in the future under existing conditions. We are told that among the clergy are some who advise their female parishioners not to go to sanatoria where both sexes are admitted. This is a real and ever-present difficulty. In our sanatoria the stringent rule that no two patients of opposite sexes shall speak to each other under penalty of immediate discharge has to be rigidly enforced.

2. It would give the patients much more freedom to roam about the grounds. At present no patient has more than one-half the grounds to wander about in without encroaching on the territory set aside for the other sex.

3. It would make it easier to enlarge the accommodation of the present sanatoria to house a considerably larger number of patients. In the summer, tents could be extensively used, which would greatly increase the number of beds available. This is especially true of the three sanatoria which in the about-to-be-described plan are set aside for men; thus the great number of men applying could be accommodated. The present cooking and dining plants would take care of this increased number if they were all of one sex, and at each sanatorium there is sufficient heating capacity to warm several new wards, which could be easily and cheaply built were the patients all men. In this way our winter accommodations could be enlarged at comparatively small cost.

Objections to such an arrangement would doubtless be raised in that it would involve treating in one institution patients in all stages of the disease. This has been carefully considered. Letters were written to the leading authorities on the subject in Europe and America. The opinions expressed by these gentlemen have been almost unanimous in stating that it is practically impossible to maintain an institution for incipient cases of tuberculosis alone, but that an arrangement by means of which the early cases can be treated in open pavilions and the advanced cases in closed wards, with separate rooms for the very sick patients, in one institution, is the only satisfactory solution of the problem.

In order, therefore, to arrange this separation of the sexes,

the Board of Trustees plans to set aside the Rutland State Sanatorium as an institution for women alone, and to reserve the three remaining sanatoria at Lakeville, North Reading and Westfield solely for men. This plan would give 350 beds for women, and a number of beds for men which could easily be brought up to over 500. This proportion of beds for men and women would approximately agree with the proportion of applications from male and female patients on our waiting list.

On Nov. 15, 1910, a hearing was given representatives of the Massachusetts Homœopathic Medical Society to present their objections to this plan. The chief objection brought up at this hearing was that, according to the proposed arrangement, male patients would be deprived of the benefits of homœopathic treatment. In view of this the Board of Trustees has requested the superintendents of the three sanatoria at North Reading, Lakeville and Westfield to be on the lookout for suitable medical assistants from homœopathic medical schools in order that those patients who desire it may receive homœopathic treatment.

PROVISION FOR CHILDREN.

There is urgent need for a proper place to treat consumptive children. The Board believes it to be unwise to place young children in wards among older patients, and as a general rule does not admit to the State sanatoria children under fifteen years of age. There should be either a separate institution for such children or a ward provided for them at the Hospital School for Crippled Children in Canton; or, better still, small local hospitals, where these children can be near their parents and frequently visited by them.

Every effort is made to bring about the fullest coöperation between the State sanatoria and the local health authorities, public and private. Upon the arrival of any patient at a sanatorium the local board of health is notified, in order that the premises which he had occupied may be properly cleaned and disinfected; likewise, upon the discharge of any patient the local board of health, the State health inspector in charge of that district and the local anti-tuberculosis association are informed, in order that the patient may be followed up at home, and made

to live according to those rules which he has learned at the sanatorium and which are so necessary for the preservation of his own health and the safety of others.

EDUCATIONAL WORK.

During the past year the Board has been active in carrying on a campaign of educational work throughout the State. As in previous years, bulletins on important and vital subjects have been sent out every two weeks to nearly 200 newspapers in the State; many letters have been written in answer to inquiries in regard to the State sanatoria and the general subject of tuberculosis; the secretary of the Board has had numerous personal interviews with physicians, patients and their friends or relatives, who come to the office in constantly increasing numbers for information and advice. Much literature in the way of reprints, cards, reports, pamphlets, etc., is kept on hand for distribution. Members of the Board, the four superintendents and the secretary have given lectures to large numbers of people on the general subject of tuberculosis, and the four superintendents have given numerous informal talks to their patients. The monthly paper, for some years past issued at the Rutland State Sanatorium, has been enlarged to include news and items of interest from the four sanatoria. This journal is now called the "Bulletin of the State Sanatoria." In it will be printed letters from discharged patients from each institution, and articles of interest to patients and their friends in regard to tuberculosis, its prevention and cure.

In April, 1910, Governor Draper signed a bill, introduced by the Associated Committees of the Massachusetts Medical Society for the Prevention and Control of Tuberculosis, appropriating the sum of \$1,000 for school tuberculosis exhibits. The expenditure of this money and the preparation and distribution of these exhibits were to be done under the supervision of this Board. After careful study twenty exhibits have been prepared, which are designed to demonstrate, by means of photographs and mottoes, the general subject of how to live and its relation to the prevention and cure of tuberculosis.

These exhibits are being distributed through the cities and

towns to serve as examples to the school committees, in the expectation that they will realize their value and supply themselves with a number of exhibits sufficient to meet the needs of the schools in their charge.

We have made arrangements with the maker of these exhibits to supply them at a price of \$35 each, which seems a reasonable compensation for the work involved. The accompanying table shows where the loan exhibits are now placed, and also shows what places have purchased exhibits under the above plan.

The loan exhibits, which are the property of the State, will be moved from place to place in order that they may become widely known.

School Tuberculosis Exhibits.

	Loaned.	Bought.
Boston, city of,	5	5
Boston Association for Relief and Control of Tuberculosis,	—	1
Brookline Anti-Tuberculosis Association,	—	1
Cambridge Anti-Tuberculosis Association,	1	—
Canton,	—	1
Chelsea,	—	1
Chicopee,	1	—
Clinton,	—	1
Fitchburg,	—	1
Gardner,	1	—
Holyoke,	1	—
Lawrence,	1	—
Pittsfield,	—	1
Springfield,	1	—
Worcester,	1	—

Exhibits under construction or awaiting distribution, 8.

WORK IN GENERAL.

Each year of our work shows an enlargement of the field we must cover.

In the past year, since the three new sanatoria were opened, this Board has had to assume the care and responsibility for the management of the four State sanatoria, widely separated and somewhat inaccessible. In order to properly watch and supervise these the Board has divided itself into four visiting committees, each responsible for one sanatorium.

At each monthly meeting the four superintendents have pre-

sented a report, which has been discussed by the whole Board. In addition to this the chairman has visited all the sanatoria at intervals, and has been in frequent personal communication with the superintendents.

The duty of forming and distributing the school exhibits, ordered by the last Legislature, has been performed in our office by the secretary and chairman.

Within the past year the special examinations for the Rutland State Sanatorium have been discontinued and a general plan for the admission of patients to all four sanatoria has been adopted, which, doing away with special examiners, has effected a saving to the State of about \$2,500, but entails a good deal of work by our office force.

Under the present plan any regular practicing physician can recommend a patient for admission. He fills out an application blank provided from our office, and after this is received the patient is allotted to the sanatorium which seems most suitable for him, preferably the one nearest his home, except in the early cases, where a preference for the Rutland State Sanatorium is expressed. This plan has worked satisfactorily, and has been favorably received by the medical profession, who had before, in some instances, commented unfavorably on the plan of special examinations for Rutland.

The above-described increase of the work of our Board makes it plain that it is impossible for a set of busy men to visit the sanatoria in the manner prescribed by section 11, chapter 474, Acts of 1907.

It is important, therefore, that the trustees should have the assistance in the above work of a competent medical man, who should give his whole time to it. Moreover, the work of the sanatoria is closely connected with the anti-tuberculosis work in many cities and towns, and it is of great importance that the closest co-operation among all agencies working against tuberculosis in the State should be fostered and directed.

It is most proper that this direction and fostering care should be exerted by the Trustees of Hospitals for Consumptives, who have charge of the sanatoria which must be the backbone of any system of State control.

After long study and consideration of the work now in our

hands, and with a realization of the need of a uniform plan and system patiently and intelligently adhered to, we feel that it is almost imperative that our Board shall have an executive secretary, who to a medical training unites a capacity for administration. Such a secretary would carry on the traditions of the work of a Board the personnel of which is always liable to change. He would have time and opportunity to master the details of our work, would keep the trustees constantly informed, and could pursue such investigations as the Board might direct in regard to the management of other sanatoria from which we might learn facts important to the management of our own. Such a man would, we believe, effect economies which would many times offset his salary. More important than this, however, he would enable us to carry on the work against tuberculosis in such a manner as to get the best results from all the measures the State is putting in operation.

It may be proper to point out here that the commission ordered by the last Legislature "to investigate and report upon a system of caring for tuberculosis patients by State and local authorities" advises that a subsidy of \$5 per week be paid for each nonpaying patient in a local hospital which meets with the approval of the Trustees of Hospitals for Consumptives, etc.

If this plan is carried into effect it will put the local hospitals for tuberculosis throughout the State under the supervision of this Board. This will call for much visitation, first to determine what hospitals shall be approved, and afterwards to ensure that a standard of efficiency acceptable to the State is maintained in them.

From the above consideration it seems clear that this Board should have at its disposal a medical health officer of high class, who should have a salary of at least \$5,000. We respectfully ask permission to seek out and engage a man fitted for these duties.

ANNUAL REPORT.

According to the present law this Board of Trustees is entitled to only 50 copies of the annual report for its own use and for distribution. In order to do active and efficient work against tuberculosis we have a long list of correspondents, from whom

we get advice and information and from whom we expect reports of the work that they are doing. We also feel that it is important to see that this report reaches a large proportion of the really active and influential practicing physicians in the State. We feel, therefore, that we could distribute 1,000 copies to the great advantage and furtherance of the campaign against tuberculosis, and would request the necessary legislation to provide us with these extra copies of this report.

DISBURSEMENTS.

The office disbursements May 5, 1910, to Nov. 30, 1910, have been as follows:—

Appropriation,	\$3,700 00
Salary of secretary,	\$1,140 20
Salary of stenographer,	561 79
Stationery, office supplies, printing, etc.,	868 24
Rent of offices,	399 97
Expenses of trustees,	123 91
Press clippings,	35 00
Telephone,	57 80
Extra clerical assistance,	98 22
Electric lighting,	6 84
	<hr/>
	\$3,291 97

The estimates for the maintenance of this office for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries of secretary and stenographer, including extra clerical hire.	\$3,200 00
Office rent,	800 00
Miscellaneous expenses, including telephone, stationery and supplies, printing of the annual report, and traveling expenses of trustees and office force,	1,100 00
	<hr/>
	\$5,100 00

NORTH READING STATE SANATORIUM.

The North Reading State Sanatorium, which was opened Sept. 22, 1909, has now been in operation for over a year. In

February, 1910, the full capacity of the institution was reached. Since that time, up to the beginning of summer, the number of patients varied from 140 to 150. During the summer months, by means of tents, a dozen extra beds were provided, so that on an average approximately 160 patients have been accommodated for the past six months. The waiting list for this institution, which draws its patients not only from Boston but from the cities of Lawrence, Lowell, Lynn, Salem, Cambridge, Haverhill, Newburyport, etc., has been constantly increasing, and is much larger than that of any of the other three institutions.

When this sanatorium was built over a deep bed of sand and gravel it was believed that the disposal of the sewage would be a comparatively simple matter. The system that was installed under the advice of a competent engineer has proved insufficient, owing to a wholly unexpected impermeability of the soil. Up to the present time we have met the difficulty in a fairly satisfactory manner by means of long filtration trenches. It is quite evident, however, that the permanent disposal of the sewage must be provided for in a more efficient manner, and we later in this report ask for a special appropriation to enable us to accomplish this.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries and wages,	\$27,500 00	
Food,	30,278 00	
Clothing and clothing material,	1,500 00	
Furnishings,	2,500 00	
Heat, light and power,	5,000 00	
Repairs and improvements,	4,000 00	
Farm, stable and grounds,	2,000 00	
Miscellaneous,	6,222 00	
	<hr/>	\$79,000 00

For special appropriations:—

Sewage purification works,	\$3,800 00
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LAKEVILLE STATE SANATORIUM.

The Lakeville State Sanatorium was declared open by Governor Draper Jan. 6, 1910. The full capacity of the institution was reached in June, 1910. Since that time the sanatorium

has been kept full, and during the summer a few extra beds were provided, making it possible to maintain an average of about 160 patients.

The grounds have been greatly improved and made attractive with numerous fruit trees, shrubs and flowers.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries and wages,	\$30,020 00	
Food,	30,000 00	
Clothing materials,	1,500 00	
Furnishings,	2,500 00	
Heat, light and power,	5,000 00	
Repairs and improvements,	2,000 00	
Farm, stable and grounds,	2,500 00	
Miscellaneous,	7,000 00	
	<hr/>	\$80,520 00
For special appropriations:—		
Recreation and employment building,	\$1,800 00	
Poultry house and poultry,	1,000 00	
Additional wells for water supply,	500 00	
Extension of sewerage system,	500 00	
Fence about sanatorium grounds,	500 00	
	<hr/>	\$4,600 00

WESTFIELD STATE SANATORIUM.

The Westfield State Sanatorium was opened by proclamation of Governor Draper Feb. 6, 1910. This institution, situated on a high hill overlooking the Westfield River and valley, has one of the most beautiful locations of any institution in the State. Until comparatively recently there were not enough applications for admission to this institution from the western part of the State to fill the vacancies. Such vacancies, accordingly, have been filled by those patients from the east who signified their willingness or desire to enter. For the past few months there have been a sufficient number of applications from Pittsfield, Westfield, Springfield, Holyoke, Chicopee, North Adams, Gardner, etc., to keep this institution full, with a waiting list. In June, 1910, the full capacity of the institution was reached. As in the other institutions, the superintendent has been able to provide a few extra beds during the summer,

so that the average quota of patients during the past few months has been about 160.

In our last report we urged the purchase of an adjoining farm, from which we believed there was danger of pollution of our water supply. The accompanying correspondence between this Board and the State Board of Health is self-explanatory, and fully sets forth the need of the purchase of this land.

THE COMMONWEALTH OF MASSACHUSETTS,

TRUSTEES OF HOSPITALS FOR CONSUMPTIVES,

3 JOY STREET, BOSTON, Nov. 7, 1910.

Massachusetts State Board of Health, State House, Boston.

GENTLEMEN:—Understanding that the chairman of your Board has recently visited the sanatorium at Westfield, and has examined the water supply to that institution with the engineer of your Board, the Trustees of Hospitals for Consumptives would be happy to have an expression of opinion from you as to the desirability of acquiring any adjoining property, with the object of protecting the water supply of that sanatorium from possible pollution.

Respectfully yours,

(Signed) ARTHUR T. CABOT,
Chairman.

THE COMMONWEALTH OF MASSACHUSETTS,

OFFICE OF THE STATE BOARD OF HEALTH,

STATE HOUSE, BOSTON, Dec. 1, 1910.

*To the Commission on Hospitals for Consumptives, ARTHUR T. CABOT,
M.D., Chairman, 3 Joy Street, Boston, Mass.*

GENTLEMEN:—The State Board of Health has considered your request of Nov. 7, 1910, for advice as to the desirability of acquiring additional lands, with the object of protecting the water supply now used by the Westfield State Sanatorium from possible pollution, and has examined the results of analyses of samples of water from the wells from which the supply of the institution has been drawn during the year 1910.

It appears that the population at the institution during the past few months has been in the neighborhood of 200, and that the quantity of water used has amounted to about 20,000 gallons per day. This quantity has apparently been obtained from the wells without serious difficulty during the very dry months of the past summer and fall.

The results of the analyses of samples of water from the wells collected during the past six months are similar to those of the samples collected last year, though there has been an improvement, especially as to the quantity of iron present in the water. The water still shows

evidence of previous pollution, which, judging from the results of recent investigations, is caused very largely by the pollution of the ground water at and in the neighborhood of the dwelling house near the highway northwest of the wells. The experience of the past year indicates that, if the present sources of water supply should be properly protected, an adequate quantity of water of suitable quality for the requirements of the institution, as at present developed, can be obtained from these wells, but if the water should not be protected, and the quality should become objectionable, the cost of securing an adequate supply of good water from some other source would be a serious one.

Considering the circumstances, it is advisable, in the opinion of the Board, for the trustees to secure control of the dwelling house and land north of the wells between the highway and the brook, and, when control has been secured, the occupation of the dwelling house and the cultivation of the land should be discontinued.

By order of the Board,

(Signed) MARK W. RICHARDSON,
Secretary.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows: —

Salaries and wages,	\$29,140 00	
Food,	30,000 00	
Clothing materials,	1,500 00	
Furnishings,	2,500 00	
Heat, light and power,	5,000 00	
Repairs and improvements,	2,500 00	
Farm, stable and grounds,	2,300 00	
Miscellaneous,	7,060 00	
	<hr/>	\$80,000 00
For special appropriations: —		
Recreation and employment building,	\$1,800 00	
Purchase of farm now owned by Mrs. Andrew Pignatare, containing 40 acres of land, dwelling house and outbuild- ings, installation of plumbing and sewer, repairs on house and fencing property,	4,000 00	
Purchase of 20 cows,	1,500 00	
Enlarging locker rooms and diet kitchens and additional piazzas,	1,000 00	
Grading,	1,000 00	
	<hr/>	\$9,300 00

RUTLAND STATE SANATORIUM.

As stated earlier in this report, according to the terms of the act creating this Board, at the completion of the three new institutions the Rutland Board ceased to exist, and this Board took over the administration of the Rutland State Sanatorium.

It is the policy of the Board, for the present at least, to reserve the Rutland sanatorium for those patients in the incipient or in the moderately advanced stage of the disease. When possible, patients in the advanced stages of the disease are sent to that institution nearest their home.

The law is still in force which states that preference shall be given, at the Rutland State Sanatorium, to citizens of this country. During the past year at the Rutland State Sanatorium 197 women, although *bona fide* residents of this State, were refused admission to that institution on account of noncitizenship. The Board of Trustees is in favor of repealing this law.

In June, 1910, Dr. Frederick L. Hills, superintendent of the Rutland State Sanatorium, handed in his resignation. The position of superintendent was offered to Dr. P. Challis Bartlett, superintendent of the New Hampshire State Sanatorium, formerly assistant superintendent at Rutland. Dr. Bartlett accepted this offer, and on June 23, 1910, was appointed superintendent of the Rutland State Sanatorium.

In August, 1910, Dr. George N. Lapham, for a number of years first assistant superintendent of the Rutland State Sanatorium, resigned his position in order to go into private practice. This resignation was accepted with great regret by the Board of Trustees.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries and wages,	\$63,000 00
Food,	78,000 00
Heat, light and power,	14,000 00
Repairs and improvements,	3,000 00
Furnishings,	3,500 00

Farm, stable and grounds,	\$8,000 00	
Clothing,	500 00	
Miscellaneous,	14,000 00	
	<hr/>	\$184,000 00

For special appropriations:—

One 150 kilowatt Westinghouse dynamo, .	\$4,840 00	
Replacing 1,900 feet sewer pipe, . .	1,975 00	
Increased fire protection,	400 00	
Resurfacing main road across sanatorium grounds,	1,400 00	
New horse barn (of wood),	8,950 00	
Enlargement of carpenter shop, . .	700 00	
Woodworking machinery,	835 00	
Extension of western veranda on infirmary,	965 00	
To make over upper and lower ell with their annexes into an infirmary, . .	865 00	
Furnishing,	390 00	
Elevator for present infirmary, . . .	1,500 00	
Covering bridge between administration and central building with concrete, .	150 00	
Ambulance,	450 00	
	<hr/>	\$23,420 00

Respectfully submitted,

ARTHUR T. CABOT.
 ARTHUR DRINKWATER.
 GEORGE A. DUNN.
 ALBERT C. GETCHELL.
 WILLIAM C. GODFREY.
 SYLVIA B. KNOWLTON.
 WILLIAM D. McFEE.

NORTH READING STATE SANATORIUM.

RESIDENT OFFICERS.

ERNEST B. EMERSON, M.D., . . . *Superintendent and Physician.*

CARL C. McCORISON, M.D., *Assistant Superintendent and Physician.*

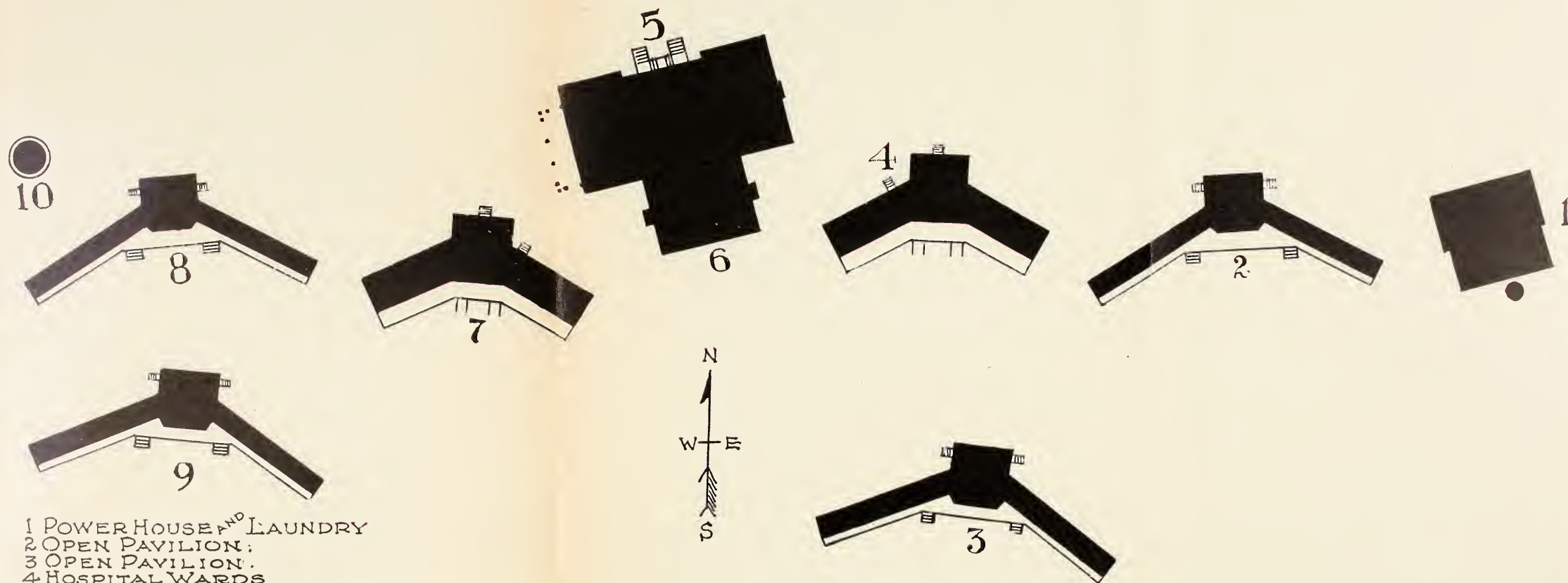
ARTHUR P. JANES, M.D., . . . *Assistant Physician.*

H. JENNIE SANFORD, . . . *Superintendent of Nurses.*

MIRA B. ROSS, . . . *Matron.*

EDWARD W. PERRY, . . . *Chief Engineer.*

WILLIAM MARGESON, . . . *Foreman.*



- 1 POWERHOUSE AND LAUNDRY
- 2 OPEN PAVILION.
- 3 OPEN PAVILION.
- 4 HOSPITAL WARDS
- 5 ADMINISTRATION BUILDING.
- 6 DINING ROOM BUILDING.
- 7 HOSPITAL WARDS
- 8 OPEN PAVILION.
- 9 OPEN PAVILION.
- 10 WATER TOWER.

BLOCK PLAN NORTH READING STATE SANATORIUM.

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

LADIES AND GENTLEMEN:— I hereby submit the report of the North Reading State Sanatorium for the year ending Nov. 30, 1910.

The records show that during the year 508 patients have been treated and that 392 have been admitted. The daily average number of patients was 148. The largest daily census was 161, and the smallest, 115.

There have been admitted during the year 30 incipient, 126 moderately advanced, 234 advanced cases, and 2 not tuberculous. Many patients have been admitted apparently as a last resort and in a condition too weak to make the journey to the sanatorium. Friends and relatives, having been informed of the condition of the patient, oftentimes within a week or two have removed these cases, that they might die at home. Of 34 patients remaining in the sanatorium one week or less, 22 were removed as stretcher cases, against advice. Probably some of these cases have been properly cared for in their own homes; others have undoubtedly gone back to homes where they could not receive proper care, and have become a menace to other members of the family and the community. It would seem as though such cases should not be admitted in the first place, or, what would be far better, that there should be some means of preventing them from going back into the community. That we are caring for many cases hitherto denied hospital treatment on account of the advanced stage of the disease is shown by our tables. There has been a daily average of 60 bed cases, approximately 40 per cent. of the daily population. Of these, the majority have been in the last stages of tuberculosis, although a few have been bed cases temporarily on account of high temperature, rapid pulse or some minor disturbance, which has required rest in bed for varying periods of time.

Of the 392 cases admitted 317 were inside workers, 286 were admitted from cities and towns having a population of 25,000 or more.

The average duration of residence in the sanatorium was 65 days; the longest residence of any one person was 377 days, and the shortest, 1 day.

Of the patients discharged during the year 138 have gained in weight, 66 have remained stationary, 57 have lost, 34 were not considered (duration of residence in the sanatorium being less than one week) and 55 patients died. Five patients have been discharged apparently cured, 32 arrested, 94 improved, 90 not improved, 55 died, 72 not considered (duration of stay being less than one month) and 2 not tuberculous. The average age was thirty-one years. One hundred and eighty-nine patients were foreign-born; 119 patients were American-born but of foreign parentage.

One hundred and sixty-six cases have been supported from private funds, 150 cases by cities and towns, 134 cases entirely by the State, and 58 private cases have later become either town or State charges. There were remaining November 30, 47 private cases, 42 city or town cases, 30 State cases and 39 unknown cases.

The total cost of maintenance for the year ending Nov. 30, 1910, was \$79,039.13; deducting \$420.01 collected from miscellaneous sources leaves a net amount expended for maintenance of \$78,619.12. The average per capita cost per week is \$10.18. There has been collected from private patients \$8,592.27, and from cities and towns \$8,179.57. Further details will be found in succeeding pages of this report.

During the past few years it has become more generally recognized that a certain amount of work, regulated and adapted to the strength of the patient, is a valuable aid in his efforts to regain health and strength. Its importance is not as yet fully appreciated. For many years we have been taught that the three essentials for the treatment and cure of tuberculosis were nourishing food, fresh air and rest. As a result many patients have been sent home with a layer of soft fat, apparently well, but in reality with little resistance to withstand the wear and tear of earning a livelihood which, as a rule, must be gained

under the same conditions which brought them to the sanatorium in the first place. In order that benefit may be derived from work it must be prescribed and regulated by the physician and be under his daily supervision, as very few are able to judge its effect on themselves. Work, properly regulated, occupies the mind, hardens the patient and enables the physician to better judge his patient's real condition. As the idea of employment for the sanatorium patient is new, more or less opposition has been encountered. This, however, is being overcome slowly as the more intelligent and better class begin to realize the reason and importance of some occupation, and have opportunity to observe the good results obtained in others. Although many are unfit to perform even the lightest of duties, I feel very strongly that those who are, in the judgment of the physicians, able to do a little, even if not more than making a bed, should be required to do their allotment if they wish to continue our treatment, and that an effort should be made to bring the curable case to a point where nearly, if not quite, a full measure of work is rendered, otherwise we have not performed our full duty to those under our charge.

IMPROVEMENTS.

Cement walks have been built connecting all of the buildings.

Waterproof and sanitary floors have been laid in the lavatories and toilets of the wards and pavilions, replacing the original wooden floors.

A forty-gallon Badger fire extinguisher, mounted on wheels, and a motor-driven circular saw have been added to our equipment.

A refrigerating machine, pipe and coils have been purchased and are to be installed during the coming winter.

Work on the henery and piggery has been started, and it is expected that the buildings will be completed and ready for use within a few weeks.

The repairs and addition to the barn, authorized by chapter 115, Acts of 1910, have been started, and it is hoped they will be completed before spring.

Contracts have been placed for a new engine, generator and incinerator.

STAFF.

Dr. Harry S. Wagner, formerly of the Agnes Memorial Hospital, Denver, was appointed to the medical staff Dec. 19, 1909, and served most efficiently until he resigned, Feb. 20, 1910, to accept the position of first assistant physician at the Westfield State Sanatorium. Dr. Gordon B. Underwood was appointed second assistant physician, succeeding Dr. Wagner, Feb. 24, 1910, and served until Aug. 21, 1910, when he resigned to accept an appointment in the United States army. Dr. Arthur P. Janes, formerly of the State Infirmary at Tewksbury, was appointed second assistant physician, succeeding Dr. Underwood, Aug. 22, 1910.

Miss Jane Barker, superintendent of nurses and matron, resigned Oct. 1, 1910, to accept a position at the Children's Hospital. Miss Barker came to us at a time when the position was most trying and difficult and when our organization was yet to be developed. Her services were of a high order of merit and deserve words only of commendation. Mrs. Jennie Sanford has been appointed superintendent of nurses, succeeding Miss Barker, and Miss Mira Ross has been appointed matron.

RECOMMENDATIONS.

Our present method of sewage disposal is unsatisfactory, unsanitary and fails to meet the requirements of a modern establishment. Plans and specifications have been prepared, in accordance with the law, for the construction of a filtration system, at an estimated expense of \$3,800. I would recommend that the trustees bring this matter before the incoming Legislature.

The sum of \$79,778 will be required for the maintenance of the sanatorium the ensuing year.

ACKNOWLEDGMENTS.

I desire to acknowledge our obligations to the Rev. Father Lee, the Rev. Father Walsh, the Rev. Father Riordan and the Rev. Mr. Junkins, who have labored for the welfare of all.

I desire to acknowledge our gratitude for the many gifts of

books, magazines and garments sent or brought to us, the donors of which oftentimes are unknown.

I wish especially to thank the Winchester Branch of the Needlework Guild of America for a box of garments, Mrs. N. H. Griggs of Newton for a box of knitted helmets, and the King's Daughters of Andover for a Christmas box.

I desire to acknowledge my gratitude to the officers, nurses and employees, who have shown their loyalty during a year which has been especially hard for all.

To you, the Board of Trustees, I wish to express my thanks and appreciation for your confidence and support.

Respectfully submitted,

ERNEST B. EMERSON,
Superintendent.

Nov. 30, 1910.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1910: —

CASH ACCOUNT.

Receipts.

Institution Receipts.

Board of inmates: —			
Private,	\$8,592	27	
Cities and towns,	8,179	57	
			<u>\$16,771 84</u>
Salaries, wages and labor: —			
Wages not called for,			19 70
Sales: —			
Food,	\$3	36	
Miscellaneous,	396	95	
			<u>400 31</u>
Miscellaneous receipts: —			
Interest on bank balances,			46 32
			<u>\$17,238 17</u>

Receipts from Treasury of Commonwealth.

Maintenance appropriations: —			
Balance of 1909,	\$4,150	25	
Advance money (amount on hand November 30),	5,000	00	
Approved schedules of 1910,	68,793	32	
			<u>77,943 57</u>
Special appropriations,			3,793 64
			<u>\$98,975 38</u>
Total,			

Payments.

To treasury of Commonwealth, institution receipts,	\$17,238	17	
Maintenance appropriations: —			
Balance November schedule, 1909,	4,150	25	
Eleven months' schedules, 1910,	68,793	32	
November advances,	4,647	97	
			<u>\$94,829 71</u>
Special appropriations: —			
Approved schedules,			3,793 64
			<u>\$98,623 35</u>
Amount carried forward,			

<i>Amount brought forward,</i>			\$98,623 35
Balance Nov. 30, 1910: —			
In bank,	\$203 34		
In office,	148 69		
		<hr/>	352 03
Total,			<hr/> \$98,975 38

MAINTENANCE.

Appropriation,	\$80,620 00
Expenses (as analyzed below),	79,039 13
	<hr/>
Balance reverting to treasury of Commonwealth,	\$1,580 87

Analysis of Expenses.

Salaries, wages and labor: —

General administration,	\$11,301 76
Medical service,	4,477 29
Ward service (male),	1,647 75
Ward service (female),	4,194 43
Repairs and improvements,	1,169 59
Farm, stable and grounds,	3,780 40
	<hr/>
	\$26,571 22

Food: —

Butter,	\$3,390 67
Butterine,	350 20
Beans,	113 97
Bread and crackers,	72 06
Cereals, rice, meal, etc.,	179 13
Cheese,	89 54
Eggs,	3,282 50
Flour,	140 00
Fish,	402 95
Fruit (dried and fresh),	1,611 34
Meats,	10,226 82
Milk,	4,784 81
Molasses and syrup,	101 30
Sugar,	1,050 40
Tea, coffee, broma and cocoa,	558 15
Vegetables,	1,669 79
Sundries,	1,504 06
	<hr/>
	29,527 69

Clothing and materials: —

Boots, shoes and rubbers,	\$125 10
Clothing,	297 00
Dry goods for clothing and small wares,	147 12
	<hr/>
	569 22

Furnishings: —

Beds, bedding, table linen, etc.,	\$904 15
Brushes, brooms,	111 21
Carpets, rugs, etc.,	578 20
Crockery, glassware, cutlery, etc.,	1,112 83
	<hr/>

<i>Amounts carried forward,</i>	\$2,706 39	\$56,668 13
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<i>Amounts brought forward,</i>	\$2,706 39	\$56,668 13
Furnishings — <i>Con.</i>		
Furniture and upholstery,	604 84	
Kitchen furnishings,	164 05	
Wooden ware, buckets, pails, etc.,	403 85	
Sundries,	143 45	
	<hr/>	4,022 58
Heat, light and power: —		
Coal,	\$3,688 64	
Freight on coal,	640 67	
Oil,	80 50	
Sundries,	8 92	
	<hr/>	4,418 73
Repairs and improvements: —		
Doors, sashes, etc.,	\$336 10	
Electrical work and supplies,	321 39	
Hardware,	469 61	
Lumber,	454 32	
Paints, oil, glass, etc.,	287 54	
Plumbing, steam fitting and supplies,	334 25	
Roofing and materials,	23 37	
Sundries,	1,726 20	
	<hr/>	3,952 78
Farm, stable and grounds: —		
Blacksmith and supplies,	\$136 55	
Carriages, wagons, etc., and repairs,	417 96	
Fertilizers, vines, seeds, etc.,	409 49	
Hay, grain, etc.,	221 33	
Harnesses and repairs,	151 39	
Horses,	500 00	
Other live stock,	59 00	
Tools, farm machines, etc.,	204 63	
Sundries,	90 23	
	<hr/>	2,190 58
Miscellaneous: —		
Books, periodicals, etc.,	\$70 01	
Chapel services and entertainments,	429 17	
Freight, expressage and transportation,	794 53	
Ice,	7 50	
Medicines and hospital supplies,	2,477 37	
Postage,	167 20	
Printing and printing supplies,	802 95	
Soap and laundry supplies,	407 32	
Stationery and office supplies,	333 23	
Travel and expenses (officials),	365 32	
Telephone and telegraph,	216 56	
Tobacco,	1 50	
Cuspidor supplies,	411 94	
Sundries,	1,301 73	
	<hr/>	7,786 33
Total expenses for maintenance,		\$79,039 13

SPECIAL APPROPRIATIONS.

Appropriations for fiscal year,	\$10,800 00
Expended during the year (see statement annexed),	3,793 64
	<hr/>
Balance Nov. 30, 1910,	\$7,006 36

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$352 03	
November cash vouchers (paid from advance money),	4,647 97	
Due from treasury of Commonwealth account		
November, 1910, schedule,	5,245 81	
	<hr/>	\$10,245 81

Liabilities.

Schedule of November bills,	\$10,245 81
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ERNEST B. EMERSON,

Treasurer.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Addition to barn,	Acts 1910, chap. 114	\$2,500 00	-	-	\$2,500 00
Additional furnishings and equipment,	Acts 1910, chap. 114	2,500 00	\$2,175 14	\$2,175 14	324 86
Hennery, piggery, etc.,	Acts 1910, chap. 114	3,300 00	1,618 50	1,618 50	1,681 50
Engine and generator, etc.,	Acts 1910, chap. 114	1,500 00	-	-	1,500 00
Land, spur tracks, etc.,	Acts 1910, chap. 114	1,000 00	-	-	1,000 00
		\$10,800 00	\$3,793 64	\$3,793 64	\$7,006 36

Respectfully submitted,

ERNEST B. EMERSON,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

REAL AND PERSONAL ESTATE.

Live stock,	\$1,560 00
Carriages and agricultural implements,	1,510 00
Machinery and mechanical fixtures,	9,575 00
Beds and bedding, inmates' department,	4,291 49
Other furniture, etc., inmates' department,	6,215 30
Personal property, superintendent's department,	4,695 52
Ready-made clothing,	375 08
Provisions and groceries,	3,926 70
Drugs and medicines,	1,847 38
Fuel,	2,790 00
Library,	100 00
Real estate,	77,375 00
	<hr/>
	\$114,261 47

This is to certify that the foregoing list is a true schedule and appraisal of the personal property and real estate at the North Reading State Sanatorium belonging to the Commonwealth Nov. 30, 1910.

CHARLES H. LITTLEFIELD.

THE COMMONWEALTH OF MASSACHUSETTS,
LAWRENCE, Dec. 3, 1910.

ESSEX, ss.

Then personally appeared the above-named Charles H. Littlefield and made oath that the foregoing schedule and appraisal is correct according to his best knowledge and belief.

DANIEL J. MURPHY,
Justice of the Peace.

LIST OF SALARIED OFFICERS AND EMPLOYEES.

Superintendent and physician (per year), . . .	\$2,500 00
Assistant superintendent and physician (per year), .	1,400 00
Assistant physician (per year),	720 00
Bookkeeper (per month),	45 00
Stenographer (per month),	30 00
Superintendent of nurses (per month), . . .	50 00
Graduate nurses (per month),	35 00
Attendants (per month),	\$20 00 to 30 00
Housekeeper (per month),	45 00
Assistant matron (per month),	25 00
Chief engineer (per month),	100 00
Assistant engineers (per month),	60 00
Fireman (per month),	50 00
Chef (per month),	75 00
Cooks (per month),	\$22 00 to 35 00
Domestics (per month),	18 00 to 20 00
General workers (per month),	25 00 to 30 00
Laundryman (per month),	30 00
Laundresses (per month),	\$22 00 to 30 00
Carpenter (per month),	60 00
Farmer (per month),	50 00
Stablemen (per month),	30 00
Farm laborers (per month),	30 00

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Correction, adopted May 15, 1906: —

Population.

	Males.	Females.	Totals.
Number of inmates present at beginning of fiscal year, .	60	56	116
Number received during the year,	199	193	392
Number discharged or died during the year,	177	173	350
Number at end of the fiscal year,	82	76	158
Daily average attendance (i.e., number of inmates actually present) during the year.	76	72	148
Average number of officers and employees during the year, .	30	28	58

Expenditures.

Current expenses: —

1. Salaries and wages,	\$26,571 22	
2. Clothing,	569 22	
3. Subsistence,	33,946 42	
4. Ordinary repairs,	3,952 78	
5. Office, domestic and outdoor ex- penses,	13,999 49	
Total,	<hr/>	\$79,039 13

Extraordinary expenses: —

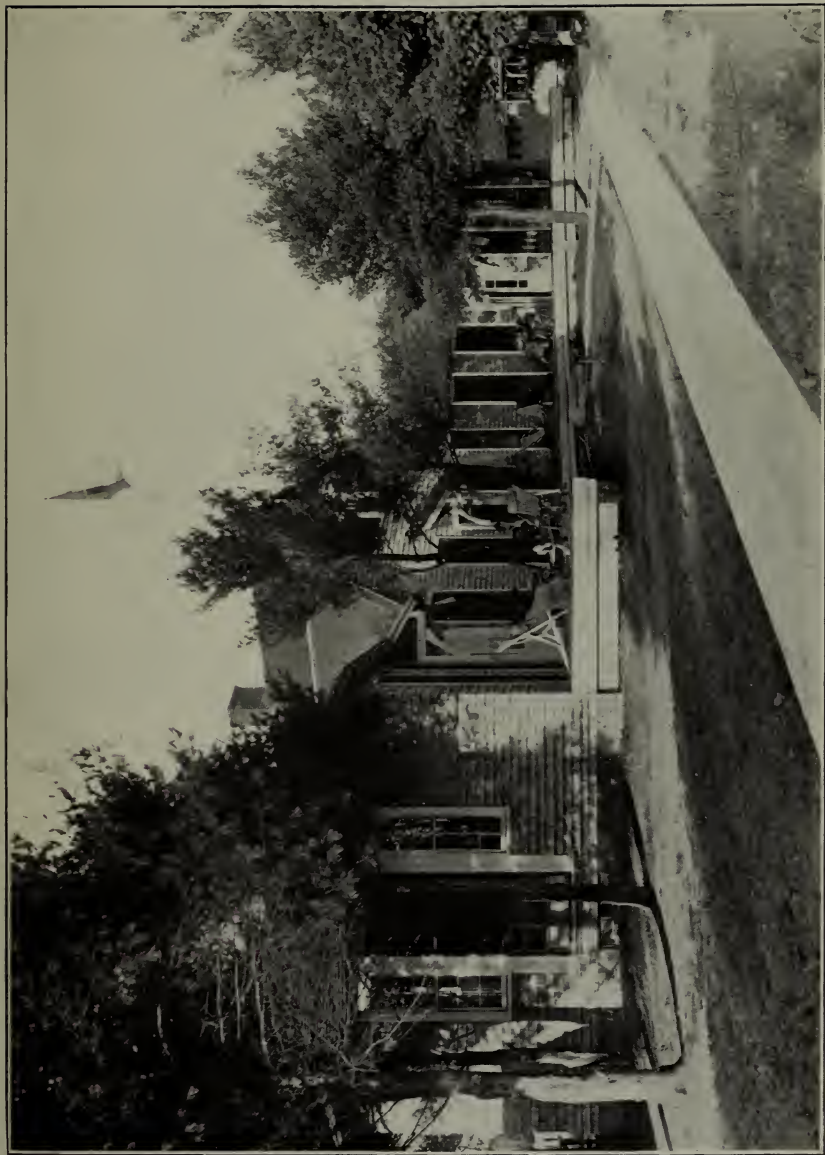
1. Additional furnishings and equip- ment,	\$2,175 14	
2. Hennery, piggery, etc.,	1,618 50	
Total,	<hr/>	3,793 64

Grand total, \$82,832 77

Notes on current expenses:—

1. Salaries and wages should include salaries of trustees or directors, if any.
2. Clothing includes shoes, and also materials for clothing and shoes if they are manufactured in the institution.
3. Ordinary repairs include all of those which simply maintain the buildings in condition, without adding to them. Any repairs which are of the nature of additions should be classed with "permanent improvements."
4. This item includes everything not otherwise provided for, *e.g.*, furniture, bedding, laundry supplies, medicines, engineer's supplies, postage, freight, library, etc.

Executive head (superintendent and resident physician): ERNEST B. EMERSON.



MEN'S WARD, NORTH READING STATE SANATORIUM.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Patients in sanatorium Dec. 1, 1909,	60	56	116
Number of patients admitted Dec. 1, 1909, to Nov. 30, 1910, inclusive.	199	193	392
Number discharged Dec. 1, 1909, to Nov. 30, 1910, inclusive,	177	173	350
Number of deaths (included in preceding item),	32	23	55
Number remaining in sanatorium Nov. 30, 1910,	82	76	158
Daily average number of patients,	76.01	72.06	148.07

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	93	110	203
Single,	102	72	174
Widowed,	4	10	14
Divorced,	—	1	1
Totals.	199	193	392

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
1 to 14 years,	3	4	7
14 to 20 years,	14	27	41
20 to 30 years,	70	80	150
30 to 40 years,	64	55	119
40 to 50 years,	29	23	52
Over 50 years,	19	4	23
Totals,	199	193	392

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
United States: —									
Massachusetts,	97	25	22	67	19	19	164	44	41
Other New England States, . .	9	18	17	11	10	9	20	28	26
Other States,	9	11	8	10	7	9	19	18	17
Total native,	115	54	47	88	36	37	203	90	84
Other countries: —									
Armenia,	3	3	3	2	2	2	5	5	5
Austria,	2	2	2	1	2	1	3	4	3
Belgium,	1	—	—	—	—	—	1	—	—
Bulgaria,	1	1	1	—	—	—	1	1	1
Canada,	19	22	25	31	40	41	50	62	66
England,	4	9	6	7	6	7	11	15	13
Finland,	1	2	1	—	—	—	1	2	1
France,	1	1	—	1	1	1	2	2	1
Germany,	2	8	8	1	4	3	3	12	11
Greece,	1	1	1	2	2	2	3	3	3
Ireland,	22	65	71	29	60	65	51	125	136
Italy,	4	4	4	4	5	5	8	9	9
Macedonia,	1	1	1	—	—	—	1	1	1
Norway,	1	1	1	—	1	—	1	2	1
Russia,	17	19	19	16	17	16	33	36	35
Scotland,	—	3	—	—	2	1	—	5	1
Sweden,	1	2	2	10	10	10	11	12	12
Syria,	1	1	1	1	1	1	2	2	2
Wales,	1	—	—	—	—	—	1	—	—
Total foreign,	83	145	146	105	153	155	188	298	301
At sea,	1	—	—	—	—	—	1	—	—
Unknown,	—	—	6	—	4	1	—	4	7
Totals,	199	199	199	193	193	193	392	392	392

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Adams,	1	Newburyport,	2
Amesbury,	1	Newton,	9
Andover,	4	North Adams,	1
Arlington,	2	North Reading,	1
Attleborough,	1	Norwood,	1
Auburndale,	1	Orleans,	1
Boston,	90	Pittsfield,	1
Bradford,	3	Reading,	2
Brookline,	2	Revere,	1
Cambridge,	10	Salem,	12
Chelsea,	10	Salisbury,	1
Concord,	1	Saugus,	3
Danvers,	2	Somerville,	17
Everett,	15	Southbridge,	1
Fitchburg,	5	Sterling,	1
Gardner,	1	Stoneham,	5
Gloucester,	6	Swampscott,	2
Haverhill,	27	Taunton,	1
Hyde Park,	1	Topsfield,	1
Ipswich,	1	Wakefield,	7
Lawrence,	25	Walpole,	1
Leominster,	1	Waltham,	9
Lexington,	1	Watertown,	3
Lowell,	16	Wellesley,	2
Lynn,	33	Weston,	1
Malden,	15	Weymouth,	1
Mansfield,	1	Whitman,	1
Marblehead,	1	Wilmington,	1
Marlborough,	1	Winchester,	4
Medford,	5	Winthrop,	4
Melrose,	5	Woburn,	3
Mendon,	1	Worcester,	1
Methuen,	1	Total,	392
Milton,	1		

TABLE 6. — *Occupations.*

	Males.	Females.		Males.	Females.
Actor,	1	-	Lather,	1	-
Baker,	1	-	Laundress,	-	2
Barber,	1	-	Letter carrier,	1	-
Bartender,	1	-	Linotypist,	1	-
Belt maker,	1	-	Machinist,	10	-
Blacksmith,	1	-	Metal polisher,	1	-
Bookbinder,	-	2	Mill operative,	8	12
Bookkeeper,	1	2	Milliner,	-	1
Box maker,	1	-	Music teacher,	1	-
Brakeman,	1	-	Newsboy,	1	-
Bricklayer,	1	-	No work,	2	5
Buffer,	2	-	Nurse, trained,	-	1
Butler,	1	-	Nursemaid,	-	2
Cabinet maker,	2	-	Painter,	4	-
Cap maker,	1	-	Pattern maker,	2	-
Carpenter,	6	-	Pedler,	2	-
Cashier,	1	1	Photographer,	1	-
Chambermaid,	-	1	Physician,	1	-
Chauffeur,	1	-	Plumber,	3	-
Civil engineer,	1	-	Porter,	1	-
Clerk,	10	4	Printer,	3	-
Commission agent,	1	-	Rigger,	1	-
Currier,	2	-	Salesman,	3	-
Domestic,	-	22	Seamstress,	-	3
Dyer,	1	-	Section hand,	2	-
Electrician,	5	-	Shipper,	4	-
Engineer,	2	-	Shoe factory operative,	31	6
Errand boy,	1	-	Shop girl,	-	3
Farmer,	3	-	Silver polisher,	1	-
Fish skinner,	1	-	Stenographer,	1	2
Gardener,	1	-	Street car conductor,	4	-
Glazier,	2	-	Student,	6	11
Hatter,	1	1	Tailor,	7	1
Housewife,	-	103	Teamster,	8	-
Insurance agent,	1	-	Telephone operator,	-	1
Iron moulder,	1	-	Tinsmith,	1	-
Jeweler,	1	1	Tool grinder,	1	-
Junk dealer,	1	-	Waiter,	1	4
Laborer,	24	-	Watchmaker,	1	2
Lamp maker,	1	-	Totals,	199	193

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	17	13	30
Moderately advanced,	64	62	126
Advanced,	118	116	234
Non-tubercular,	-	2	2
Totals,	199	193	392

TABLE 8. — *Condition on Discharge.*

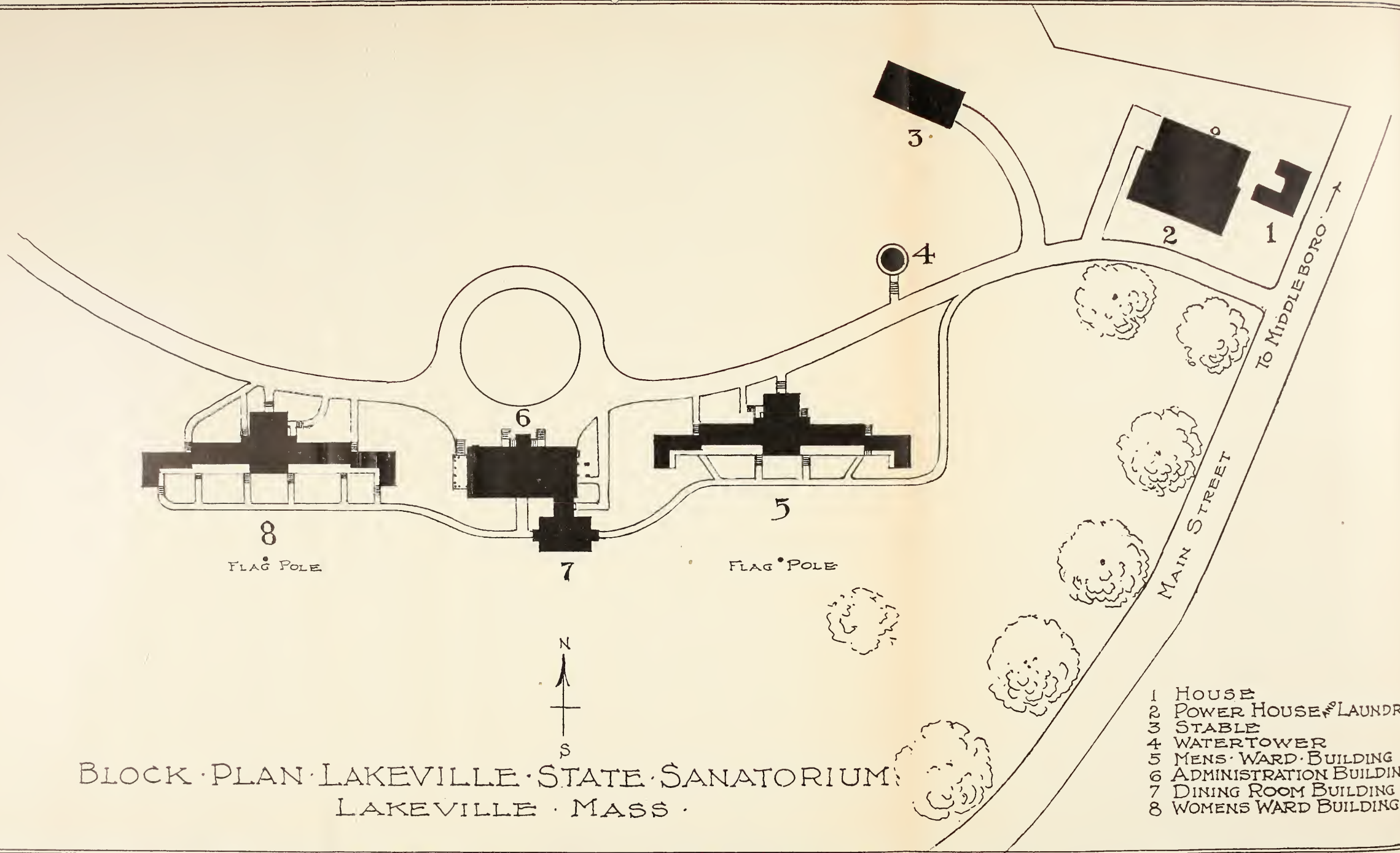
	Males.	Females.	Totals.
Apparently cured,	3	2	5
Arrested,	19	13	32
Improved,	43	51	94
Progressive,	41	49	90
Died,	32	23	55
Not considered (duration of stay less than one month), .	39	33	72
Non-tubercular,	-	2	2
Totals,	177	173	350

TABLE 9. — *Deaths.*

DURATION OF DISEASE.				LENGTH OF RESIDENCE IN SANATORIUM.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	11	4	15
1 to 2 months,	-	-	-	8	9	17
2 to 3 months,	-	-	-	2	1	3
3 to 4 months,	-	-	-	5	1	6
4 to 5 months,	-	-	-	2	1	3
5 to 6 months,	-	-	-	2	3	5
6 to 7 months,	-	-	-	1	-	1
7 to 8 months,	-	-	-	-	2	2
8 to 9 months,	-	-	-	-	1	1
9 to 10 months,	-	-	-	1	1	2
10 to 12 months,	-	1	1	-	-	-
12 to 18 months,	5	6	11	-	-	-
18 to 24 months,	5	4	9	-	-	-
Over 2 years,	20	11	31	-	-	-
Not known,	2	1	3	-	-	-
Totals,	32	23	55	32	23	55

TABLE 10.— *Cause of Death.*

	Males.	Females.	Totals.
Phthisis,	32	22	54
Chronic interstitial nephritis,	—	1	1
Totals,	32	23	55



LAKEVILLE STATE SANATORIUM.

RESIDENT OFFICERS.SUMNER COOLIDGE, M.D., *Superintendent.*S. W. CORNISH, M.D., *Physician.*JOHN J. STACK, M.D., *Physician.*

ELLA M. KELLEY, *Matron.*LESTON P. GIDDINGS, *Steward.*THOMAS SAMPSON, *Farm Foreman.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

This sanatorium was opened by proclamation of His Excellency Governor Draper on Jan. 6, 1910, at which time only the men's ward and administration building were ready for occupancy.

The first male patient was admitted Jan. 19, 1910. The women's ward was ready for patients about a month later, and the first female patient was admitted February 22.

Opening as we did in midwinter, it was thought best to fill the beds slowly in order the better to insure the comfort of the patients, so we did not approach our full capacity till June. Since that time we have maintained a daily average of 151+ patients.

On the whole, the admissions of the later months of the year show a slightly larger proportion of early cases than was the case in the early months.

There is a strong prejudice against allowing patients to die away from their families, as a result of which several have been removed from the sanatorium, against advice, a few days before death.

RESIDENCE.

The geographical distribution of cases admitted shows that 64 towns are represented, of which Boston sent us 36 per cent. of all cases, New Bedford 9 per cent., Brockton 7 per cent. and Fall River 4 per cent.

RESULTS.

To estimate the results of our first year's treatment is difficult. While a considerable proportion of our cases have remained in the sanatorium long enough to show definite results, a great many, including many hopeful cases, have become impa-

tient, or dissatisfied, or unruly, and have moved on without receiving any appreciable benefit from their stay. This is probably due to the fact that many of our cases do not come to us of their own free will and accord, but, to a certain extent, are coerced by boards of health, societies or friends.

Of 229 patients discharged, 24 stayed one week or less. Of the remaining 205 the number of those who gained weight was 114, — 67 men and 47 women. The average gain of the men was 8.6 pounds and of the women 7.8 pounds. The greatest gain of a man was 60 pounds and of a woman 36 pounds. There were 61 who lost weight, — 35 men and 26 women.

The average stay of these cases was 80 days. Our records show that 61.6 per cent. of all cases considered were improved and 38.4 per cent. not improved.

The discharge of a few cases apparently cured or arrested has been a source of great encouragement to the other patients.

Of 150 patients who on November 30 had been in the sanatorium one week or more, 68 women and 60 men gained, the women averaging 13.6 pounds, the men $9\frac{1}{2}$ pounds. Of the 68 women who gained, 52, who had been with us three months or more, made an average gain of 15.7 pounds, while the average gain of those who remained in the sanatorium six months or more was 16.9 pounds, and 8 women who have remained nine months or more averaged 17.7 pounds each. It is to be noted that the average stay of patients remaining in the sanatorium November 30 was 141 days.

CLASSIFICATION.

Of 386 cases admitted, the sanatorium classification of 162 differed from the classification before admission. Of these, 31 favored the patient, 119 were less favorable to the patient and 12 entered without previous classification.

WATER SUPPLY.

Although many of the wells in this vicinity have been dry for several months, the water supply of the sanatorium has been adequate for the actual necessities of the institution, and the

quality of the water is unexcelled in this State; but the wells have been drawn upon to their full capacity, showing the need of additional wells in the near future.

SEWAGE DISPOSAL.

Up to the present time the sewage has been disposed of very satisfactorily underground by subsoil tiling, which serves the additional purpose of fertilizing the land. There is need of an extension of the system to allow the use of the several sections intermittently. A small expenditure at this time will provide ample capacity for several years.

FARM, STABLE AND GROUNDS.

Our records show what may seem to be an excessive expenditure in this department. When it was found that we should not need all of our maintenance appropriation in the early months of the year, because of the small number of patients, it was thought best to use the money available in improving the grounds, buildings and equipment. To this end an effort was made to complete, if possible, the most difficult part of the landscaping, *i.e.*, the building of an avenue and walks, the grading and planting immediately about the buildings, and the extension of the sewerage system as found necessary. This work was difficult and expensive; in fact, the greater part of the money spent in this department was spent for this kind of work, the actual work of producing about \$1,100 worth of farm produce being merely incidental.

The vegetable garden was very successful and greatly appreciated by the patients; in fact, few vegetables except potatoes were bought during the summer months.

About 3 acres of brush land have been cleared and ploughed and about 1½ acres have been set with apples, pears and other small fruits.

REPAIRS AND IMPROVEMENTS.

A considerable expenditure has been made in repairs and improvements, but it is believed that the efficiency of the whole plant has been materially increased thereby.

SPECIAL APPROPRIATIONS.

All the new work for which special appropriations were made is progressing satisfactorily. The new barn is more than half completed; the duplicate generating set is erected and almost ready for use; the refrigerating engine is erected and the ammonia piping has been commenced; a poultry house has been completed and is now occupied by 400 hens; a complete outfit of screens was purchased early in the summer; an incinerator is almost completed; the furniture and equipment of the institution have been greatly improved by the special appropriation for that purpose.

IMPROVEMENTS DESIRED.

The greatest need of the institution is a building for recreation and occupation of patients. At present the patients are huddled into the wards in stormy weather because we have no other shelter for them. A building is needed which shall contain an assembly room, several workshops and a laboratory.

In addition to the extension of our sewage disposal, as mentioned above, there is urgent need of a fence about the sanatorium grounds. Our neighbors rightly object to the trespassing of our patients, and we likewise object to the trespassing of our neighbors and their animals, and especially to undesirable visitors, who frequently visit patients clandestinely.

In our last annual report a request was made for \$1,800 for a hennerly. Eight hundred dollars was appropriated on the ground that we could make a beginning with that amount. This has been done, but the plant is not complete and cannot be handled profitably in its present condition.

The capacity of our water plant should be increased without delay by the addition of five new wells.

MEDICAL SERVICE.

Dr. John E. Runnells, first assistant at the opening of the sanatorium, resigned June 23 to accept the position of superintendent of the New Hampshire State Sanatorium. His service during those early months of organization was most faithful

and efficient. He was succeeded by Dr. Solon W. Cornish, A.B., Dartmouth, M.D., Harvard, 1908. Dr. Harold F. Parker served as second assistant from March 26 to August 31, when he was succeeded by Dr. John J. Stack, A.M., Holy Cross, M.D., Harvard, 1907.

Miss Adele L. Richardson, supervisor of nurses since the opening of the sanatorium, resigned in October to take up post-graduate work. She performed her very difficult task with loyalty to the institution and with a zeal limited only by her physical strength. Her place has not yet been filled.

I wish to express my appreciation of the unfailing support and encouragement of your Board, and of the loyalty of heads of departments and their subordinates, without which no institution can succeed.

Respectfully submitted,

SUMNER COOLIDGE,
Superintendent.

Nov. 30, 1910.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1910:—

CASH ACCOUNT.

*Receipts.**Institution Receipts.*

Board of inmates:—

Private,	\$5,344 12
Cities and towns,	5,678 59

\$11,022 71

Sales:—

Food,	\$2 75
Clothing and materials,	34 45
Miscellaneous,	181 11

218 31

Farm, stable and grounds:—

Pigs and hogs,	\$32 00
Vegetables,	28 85
Sundries,	80

61 65

Miscellaneous receipts:—

Interest on bank balances,	\$60 65
Sundries,	90

61 55

\$11,364 22
Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Advance money (amount on hand November 30),	\$5,000 00
Approved schedules of 1910,	66,472 89

71,472 89

Special appropriations,	11,667 08
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Total,	\$94,504 19
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Payments.

To treasury of Commonwealth, institution receipts,	\$11,364 22
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Maintenance appropriations:—

Eleven months' schedules, 1910,	66,472 89
November advances,	2,952 08

\$80,789 19

Amount carried forward,	\$80,789 19
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<i>Amount brought forward,</i>									\$80,789 19
Special appropriations:—									
Approved schedules,									11,667 08
Balance Nov. 30, 1910:—									
In bank,							\$1,809 85		
In office,							238 07		
									2,047 92
Total,									\$94,504 19

MAINTENANCE.

Appropriation,									\$75,990 00
Expenses (as analyzed below),									75,975 19
Balance reverting to treasury of Commonwealth,									\$14 81

Analysis of Expenses.

Salaries, wages and labor:—									
General administration,							\$12,405 23		
Medical service,							3,664 30		
Ward service (male),							830 86		
Ward service (female),							2,852 11		
Repairs and improvements,							2,419 59		
Farm, stable and grounds,							5,011 12		
									\$27,183 21
Food:—									
Butter,							\$1,656 54		
Butterine,							62 85		
Beans,							82 75		
Bread and crackers,							71 76		
Cereals, rice, meal, etc.,							239 03		
Cheese,							14 67		
Eggs,							2,001 93		
Flour,							637 27		
Fish,							538 53		
Fruit (dried and fresh),							418 95		
Meats,							6,232 06		
Milk,							5,003 91		
Molasses and syrup,							24 26		
Sugar,							823 32		
Tea, coffee, broma and cocoa,							444 25		
Vegetables,							655 72		
Sundries,							492 43		
									19,400 23
Clothing and materials:—									
Boots, shoes and rubbers,							\$43 47		
Clothing,							313 33		
Dry goods for clothing and small wares,							57 41		
Furnishing goods,							5 75		
									419 96
Furnishings:—									
Beds, bedding, table linen, etc.,							\$1,584 43		
Brushes, brooms,							178 30		
Carpets, rugs, etc.,							624 89		
<i>Amounts carried forward,</i>							\$2,387 62		\$47,003 40

<i>Amounts brought forward,</i>	\$2,387 62	\$47,003 40
Furnishings — <i>Con.</i>		
Crockery, glassware, cutlery, etc.,	830 76	
Furniture and upholstery,	1,042 64	
Kitchen furnishings,	989 47	
Wooden ware, buckets, pails, etc.,	129 32	
Sundries,	330 74	
	<hr/>	5,710 55
Heat, light and power: —		
Coal,	\$4,658 37	
Freight on coal,	42 00	
Oil,	62 63	
Sundries,	116 04	
	<hr/>	4,879 04
Repairs and improvements: —		
Brick,	\$75 24	
Cement, lime and plaster,	707 32	
Doors, sashes, etc.,	295 94	
Electrical work and supplies,	397 76	
Hardware,	280 24	
Lumber,	1,055 45	
Machinery, etc.,	101 30	
Paints, oil, glass, etc.,	445 99	
Plumbing, steam fitting and supplies,	1,473 54	
Roofing and materials,	61 59	
Sundries,	996 99	
	<hr/>	5,891 36
Farm, stable and grounds: —		
Blacksmith and supplies,	\$151 44	
Carriages, wagons, etc., and repairs,	894 36	
Fertilizers, vines, seeds, etc.,	950 92	
Hay, grain, etc.,	1,120 55	
Harnesses and repairs,	92 51	
Horses,	875 00	
Cows,	190 00	
Other live stock,	237 00	
Rent,	225 00	
Tools, farm machines, etc.,	231 06	
Sundries,	367 07	
	<hr/>	5,334 91
Miscellaneous: —		
Books, periodicals, etc.,	\$20 05	
Chapel services and entertainments,	130 00	
Freight, expressage and transportation,	831 80	
Funeral expenses,	110 00	
Hose, etc.,	246 06	
Ice,	552 90	
Medicines and hospital supplies,	2,603 78	
Medical attendance, nurses, etc. (extra),	14 84	
Postage,	102 00	
Printing and printing supplies,	296 81	
Soap and laundry supplies,	664 48	
Stationery and office supplies,	375 20	
	<hr/>	
<i>Amounts carried forward,</i>	\$5,947 92	\$68,819 26

<i>Amounts brought forward,</i>	\$5,947 92	\$68,819 26
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Miscellaneous — *Con.*

Travel and expenses (officials),	287 19	
Telephone and telegraph,	230 56	
Tobacco,	.	.	.	.	3 50	
Sundries,	.	.	.	.	686 76	
					<hr/>	7,155 93
Total expenses for maintenance,	.	.	.	.		\$75,975 19

SPECIAL APPROPRIATIONS.

Appropriations for fiscal year,	.	.	.	.		\$21,350 00
Expended during the year (see statement annexed),					\$11,667 08	
Reverting to treasury of Commonwealth,	.	.			10	
					<hr/>	11,667 18
Balance Nov. 30, 1910,	.	.	.	.		\$9,682 82

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	.	.	.	.	.	\$2,047 92
November cash vouchers (paid from advance money),						2,952 08
Due from treasury of Commonwealth account						
November, 1910, schedule,		4,502 30
					<hr/>	\$9,502 30

Liabilities.

Schedule of November bills,	\$4,502 30
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Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
New barn,	Acts 1910, chap. 118	\$10,000 00	\$1,194 31	\$1,194 31	\$8,805 69
Refrigerating machine,	Acts 1910, chap. 118	2,500 00	1,859 08	1,859 08	640 92
Poultry house and poultry, incinerator, walks and screens,	Acts 1910, chap. 118	2,350 00	2,216 07	2,216 07	133 93
Furniture and equipment,	Acts 1910, chap. 118	5,000 00	4,999 90	4,999 90	10 ¹
Duplicate generating machine,	Acts 1910, chap. 118	1,500 00	1,397 72	1,397 72	102 28
		\$21,350 00	\$11,667 08	\$11,667 08	\$9,682 82

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

SUMNER COOLIDGE,
Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,
Assistant Supervisor of Accounts.

VALUATION.

Real estate:—

Land, number of acres, 75, valuation, . . .	\$4,125 00
Buildings and water plant, valuation, . . .	93,875 00
Total real estate valuation,	\$98,000 00

Personal estate:—

Live stock on farm,	3,162 00
Produce of farm on hand,	106 50
Carriages and agricultural implements, . . .	2,047 83
Machinery and mechanical fixtures,	1,625 00
Beds and bedding in inmates' department, . .	4,436 00
Other furniture in inmates' department, . . .	1,702 63
Personal property of State in superintendent's department,	3,598 54
Ready-made clothing,	132 09
Provisions and groceries,	730 23
Drugs and medicines,	100 00
Fuel,	860 00
Other supplies undistributed,	1,225 38
Total personal estate valuation,	\$19,726 20
Total valuation,	\$117,726 20

LIST OF SALARIED OFFICERS AND EMPLOYEES.

Superintendent and treasurer (per annum), . . .	\$2,500 00
Physician (per annum),	1,200 00
Physician (per annum),	720 00
Matron (per annum),	720 00
Steward (per annum),	1,200 00
Steward's assistant (per month),	45 00
Chief engineer (per month),	75 00
Office assistant (per month),	18 00
Farmer (per month),	\$40 00 to 60 00
Supervisor (per month),	45 00
Nurses (per month),	\$25 00 to 35 00
Attendants (per month),	18 00 to 25 00
Orderlies (per month),	20 00 to 30 00
Cook (per month),	50 00 to 60 00
Assistant cook (per month),	40 00 to 50 00
Baker (per month),	40 00 to 50 00
Storeroom helper (per month),	25 00 to 35 00
Engineers (per month),	50 00 to 60 00
Fireman (per month),	40 00
Laundry help, male and female (per month), . . .	\$20 00 to 35 00
Kitchen help (per month),	18 00 to 25 00
Waiters, male and female (per month),	18 00 to 20 00
Expressman (per month),	30 00
Farm help (per month),	25 00
Laborers (per day) (without living),	1 80
Carpenter (per day) (without living),	3 28
Carpenter (per month),	55 00
Matron's assistant (per month),	25 00
Ward maids (per month),	18 00
General helpers (per month),	\$18 00 to 35 00

SPECIAL REPORT.

The following report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of patients present at beginning of fiscal year,	—	—	—
Number received during the year,	202	184	386
Number discharged or died during the year,	122	107	229
Number at end of the fiscal year,	80	77	157
Daily average attendance (i.e., number of inmates actually present) during the year.	67	57	124
Average number of officers and employees during the time institution was full (June 1 to November 30).	35	23	58

Expenditures.

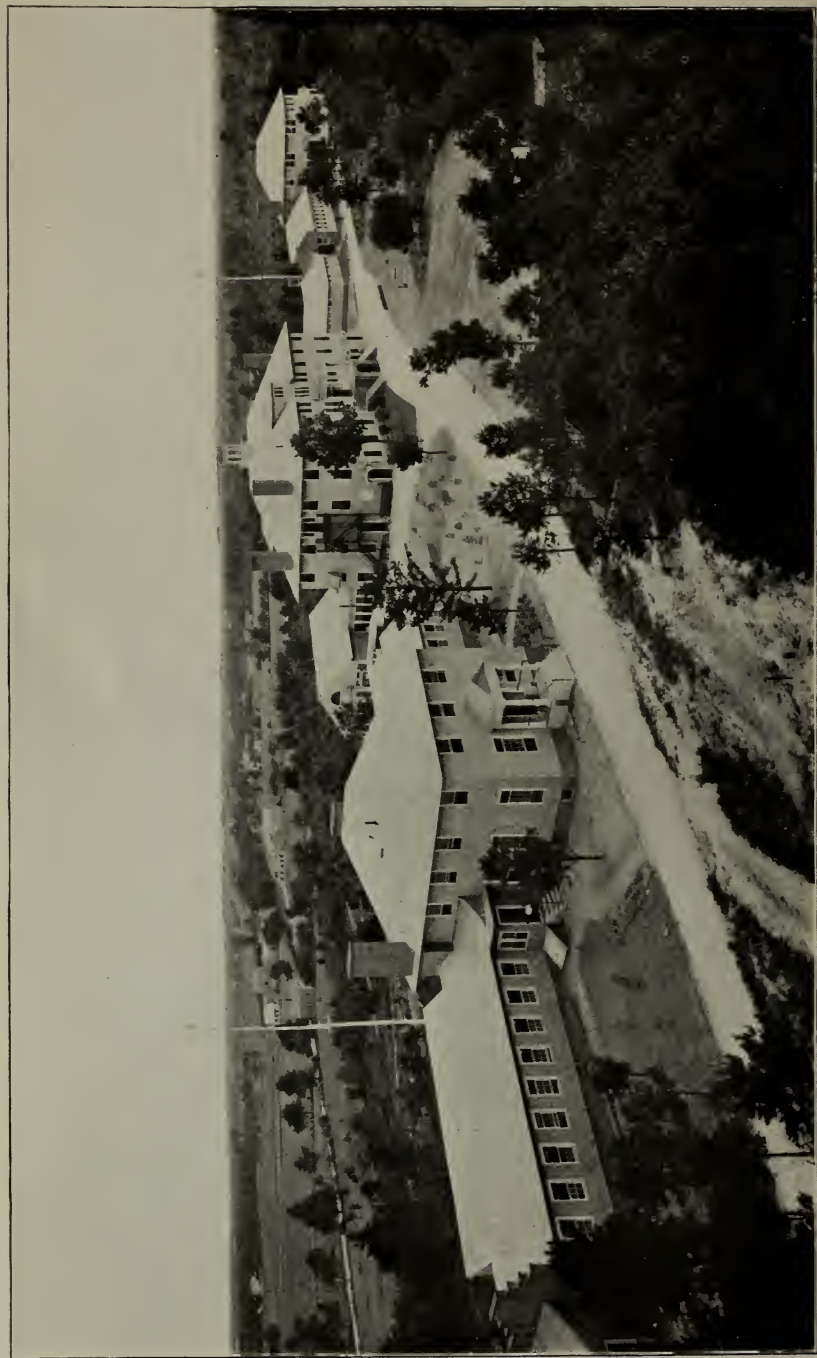
Current expenses:—

1. Salaries and wages,	\$27,183 21	
2. Clothing,	419 96	
3. Subsistence,	19,400 23	
4. Ordinary repairs and improvements,	5,891 36	
5. Office, domestic, and out-doors expenses,	23,080 43	
Total,	<hr/>	\$75,975 19

Extraordinary expenses:—

1. New buildings, land, etc.,	\$1,594 31	
2. Permanent improvements to existing buildings and grounds,	10,072 77	
Total,	<hr/>	11,667 08

Grand total,	<hr/>	\$87,642 27
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LAKEVILLE STATE SANATORIUM.

Summary of Current Expenses.

Total expenditures,	\$87,642 27
Deducting extraordinary expenses,	11,667 08
	<hr/>
	\$75,975 19
Deducting amount of sales,	341 51
	<hr/>
	\$75,633 68

Dividing this amount by the daily average number of patients, 124, gives a cost for the year January 5 to November 30 of \$609.95, equivalent to an average weekly net cost of \$12.95.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted, Jan. 19 to Nov. 30, 1910, inclusive.	202	184	386
Number discharged, Jan. 19 to Nov. 30, 1910, inclusive, .	122	107	229
Number of deaths (included in preceding items), . .	17	11	28
Number remaining in sanatorium Nov. 30, 1910, . . .	80	77	157
Daily average number of patients,	67	57	124
Daily average number of bed patients, June 1 to Nov. 30, 1910,	20	21	41

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	91	90	181
Single,	105	82	187
Widowed,	7	9	16
Divorced,	—	—	—
Separated,	—	2	2
	203	183	386

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
1 to 14 years,	1	2	3
14 to 20 years,	26	23	49
20 to 30 years,	63	74	137
30 to 40 years,	58	62	120
40 to 50 years,	36	20	56
Over 50 years,	15	6	21
	199	187	386

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
United States: —									
Massachusetts,	79	15	15	58	16	17	137	31	32
Other New England States, . . .	10	9	7	9	6	9	19	15	16
Other States,	5	2	5	12	5	4	17	7	9
Total native,	94	26	27	79	27	30	173	53	57
Other countries: —									
Canada,	24	24	23	26	25	30	50	49	53
Corea,	—	—	1	—	—	—	—	—	1
Denmark,	—	1	1	—	—	—	—	1	1
England,	11	8	11	4	7	8	15	15	19
Finland,	3	1	1	2	1	1	5	2	2
France,	—	—	—	1	1	1	1	1	1
Germany,	1	3	2	1	4	2	2	7	4
Ireland,	21	61	58	32	59	53	53	120	111
Italy,	3	3	3	7	4	4	10	7	7
Norway,	—	1	1	—	—	—	—	1	1
Poland,	—	—	—	3	4	4	3	4	4
Portugal,	2	1	1	2	2	1	4	3	2
Roumania,	1	—	—	—	—	—	1	—	—
Russia,	27	23	24	16	10	9	43	33	33
Scotland,	1	2	2	1	3	1	2	5	3
Sweden,	7	8	8	4	6	5	11	14	13
Switzerland,	2	—	—	—	—	—	2	—	—
Turkey,	3	3	3	1	—	—	4	3	3
Wales,	—	—	—	1	—	—	1	—	—
Western Islands,	1	2	1	1	4	2	2	6	3
Total foreign,	107	141	140	102	130	121	209	271	261
Unknown,	1	35	35	3	27	33	4	62	68
Totals,	202	202	202	184	184	184	386	386	386

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Arlington,	2	Milton,	1
Ashland,	1	Nantucket,	1
Attleborough,	12	New Bedford,	34
Blackstone,	1	Newburyport,	1
Boston,	141	Newton,	4
Bournedale,	1	Norwood,	5
Bridgewater,	2	North Attleborough,	3
Brockton,	27	Oak Bluffs,	1
Brookline,	1	Pittsfield,	1
Canton,	1	Plymouth,	4
Cambridge,	5	Quincy,	12
Chelsea,	4	Randolph,	1
Dalton,	1	Raynham,	1
Dedham,	2	Rockland,	2
Dennis,	1	Rutland,	2
Dudley,	1	Scituate,	1
Easton,	2	Somerville,	6
Everett,	5	South Braintree,	1
Fall River,	16	Springfield,	1
Fitchburg,	5	Stoughton,	3
Framingham,	3	Taunton,	14
Gardner,	1	Truro,	1
Hanover,	1	Walpole,	1
Harding,	1	Waltham,	5
Haverhill,	1	Watertown,	1
Holyoke,	1	Wareham,	2
Hyde Park,	8	Westfield,	1
Lawrence,	2	Whitman,	5
Lynn,	4	Woburn,	1
Medford,	2	Woods Hole,	1
Medway,	1	Worcester,	3
Melrose,	7	Total,	386
Middleborough,	3		

TABLE 6. — *Occupations.*

	Males.	Females.		Males.	Females.
Attendant,	-	1	Jeweler,	7	1
Baker,	1	-	Laborer,	16	-
Barber,	1	1	Laundress,	-	2
Blacksmith,	3	-	Longshoreman,	1	-
Bookkeeper,	2	-	Machinist,	8	-
Bookbinder,	1	2	Marble cutter,	1	-
Brakeman,	1	-	Mechanic,	1	-
Candy factory,	-	3	Milliner,	-	2
Card room,	1	-	Mill operative,	19	8
Carpenter,	5	-	Missionary,	-	2
Carriage shop,	1	-	Nurse,	-	2
Chair maker,	1	-	Painter,	8	-
Charwoman,	-	1	Paperworker,	1	-
Chemical worker,	1	-	Pedler,	1	-
Choreman,	2	-	Photographer,	1	-
Cigar stripper,	-	1	Pianist,	-	1
Clerk,	15	6	Plumber,	1	-
Color mixer,	1	-	Printer,	1	1
Compositor,	-	1	Reporter,	1	-
Designer,	1	-	Roofer,	1	-
Domestic,	5	21	Rubber worker,	3	-
Dressmaker,	-	2	Sailor,	3	-
Dry goods buyer,	1	-	Sculptor,	1	-
Electrician,	3	-	Seamstress,	-	2
Enameler,	1	-	Shoemaker,	7	-
Engineer,	2	-	Shoeworker,	12	3
Errand boy,	1	-	Silversmith,	2	-
Farmer,	1	-	Stage mechanic,	1	-
Florist,	1	-	Steam fitter,	2	-
Foundry,	1	-	Stonecutter,	3	-
Glass blower,	2	-	Stone mason,	1	-
Glass engraver,	1	-	Student,	6	9
Hatter,	1	-	Switchman,	1	-
Hostler,	1	-	Tailor,	13	-
Housewife,	-	105	Teamster,	6	-
Inspector paper tubes,	1	-	Telephone operator,	-	1
Ironworker,	2	-	Telegraph operator,	1	-

TABLE 6. — *Occupations — Concluded.*

	Males.	Females.		Males.	Females.
Trunk maker,	1	-	Treer,	1	-
Vocalist,	1	-	Unknown,	6	6
Woodworker,	1	-	Totals,	202	184
Wool sorter,	1	-			

TABLE 7. — *Condition on Discharge.*

	Males.	Females.	Totals.	Per Cent.
Apparently cured,	5	-	5	3.14
Arrested,	5	2	7	4.40
Improved,	42	44	86	54.09
Unimproved,	32	29	61	38.37
Totals,	84	75	159	-

Average stay of discharged patients, 89 days.

TABLE 8. — *Classification of Discharges.*

	Males.	Females.	Totals.
Total number discharged,	121	103	229
Number died,	17	11	28
	104	97	201
Not considered,	20	22	42
Total number considered,	84	75	159

TABLE 9. — *Deaths, Duration of Disease, Length of Stay in Sanatorium and Cause of Death.*

	DURATION OF TUBERCULOSIS.			LENGTH OF STAY.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	7	5	12
1 to 2 months,	-	-	-	3	1	4
2 to 3 months,	-	-	-	1	1	2
3 to 4 months,	-	-	-	3	-	3
4 to 5 months,	1	-	1	1	2	3
5 to 6 months,	-	-	-	1	1	2
6 to 7 months,	-	2	2	1	1	2
7 to 8 months,	2	-	2	-	-	-
9 to 10 months,	-	1	1	-	-	-
1 to 2 years,	9	4	13	-	-	-
2 to 3 years,	1	1	2	-	-	-
3 to 4 years,	1	-	1	-	-	-
5 to 6 years,	2	-	2	-	-	-
Unknown,	1	3	4	-	-	-
Totals,	17	11	28	17	11	28

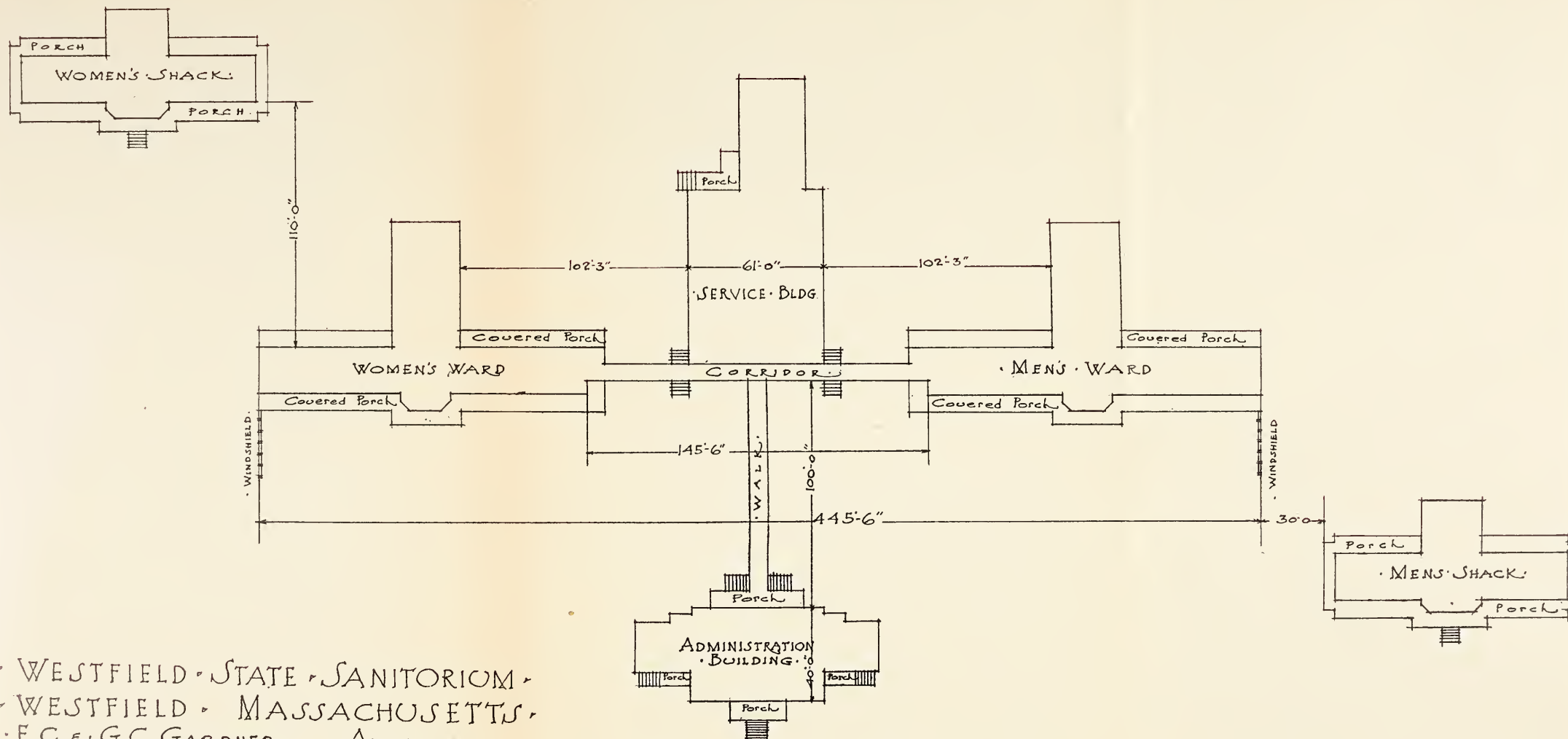
Cause of death, phthisis, 28.

WESTFIELD STATE SANATORIUM.

RESIDENT OFFICERS.

HENRY D. CHADWICK, M.D.,	.	.	.	<i>Superintendent.</i>
HARRY S. WAGNER, M.D.,	.	.	.	<i>Physician.</i>
ROY MORGAN, M.D.,	.	.	.	<i>Physician.</i>

MARY C. MACNEIL,	.	.	.	.	<i>Supervisor of Nurses.</i>
HERBERT W. SMITH,	.	.	.	.	<i>Steward.</i>
WILLIAM H. AUSTIN,	.	.	.	.	<i>Chief Engineer.</i>
FRANK P. BUXTON,	.	.	.	.	<i>Farmer.</i>



WESTFIELD STATE SANITORIUM
 WESTFIELD MASSACHUSETTS
 E.C. & G.C. GARDNER ARCHITECTS
 SPRINGFIELD MASSACHUSETTS

BLOCK PLAN
 Scale 40ft = 1 inch

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

LADIES AND GENTLEMEN: — On Feb. 16, 1910, the sanatorium was declared open by His Excellency the Governor. As soon thereafter as possible a staff of employees was engaged, and the buildings were put into condition for the reception of patients. The first one was admitted February 24. Applications for admission from the western part of the State did not come in fast enough to fill the beds, and for that reason many patients from the eastern part of the State were admitted. The 150 beds were filled for the first time on June 9. It was later found that 4 additional beds could be placed in each of the pavilions, thereby increasing the total capacity to 158. The daily average number of patients since opening has been 128.4. Three hundred and seventy-one patients have been admitted. Of this number, 214 have been discharged, leaving 157 patients in the sanatorium November 30. The condition of patients on admission and discharge will be found in the appended tables of statistics. The average length of stay of all discharged patients was 75 days.

As it was more than three months after the opening of the sanatorium before all of the beds were filled, it brings our daily average number of patients down to 128.4. The gross per capita cost on this basis is \$12.67; per capita cost, minus sales, \$12.60; less total receipts, \$10.64.

Of the 371 patients admitted, 112 paid their board, the board of 101 was paid by cities or towns, 31 were State charges, and the status of 85 has not yet been determined.

The daily average number of bed patients has been 23 men and 31 women, a total of 54.

Forty-six patients stayed less than one month. A few of

these left because of homesickness, but most of them went home when they found that they could not recover, wishing to spend their last days with their relatives and friends. It is probable that at least one-half of this number did not live more than one month after reaching home.

The two greatest difficulties in the way of successful treatment is to get patients to go to a sanatorium when tuberculosis first manifests itself, and when admitted, to induce them to remain long enough for the disease to become thoroughly arrested.

Usually they insist upon returning home as soon as the active symptoms subside under the rest treatment. No physical examination can determine what the degree of arrest is in an individual case, as at rest a patient may be apparently cured, but under home conditions of living and work the disease frequently lights up into renewed activity. These relapses can be largely prevented if while in the sanatorium patients will begin work as soon as they are able, gradually increasing the day's labor until it approximates the expenditure of energy required by the occupation to which they must return. If a patient has done this he has increased his resistance to tuberculosis to the point where he can become self-supporting, with a good prospect of keeping well. As most of our patients were beyond the incipient stage and with active disease, but little work could be expected from them the first few months. Many of these patients, however, are now doing light work about the buildings. This next year I hope much more of the work in the dining room and wards and about the grounds can be done by patients.

IMPROVEMENTS.

The grounds about the buildings have been graded and surfaced with loam, with the exception of the west end of the women's ward and the rear and east end of the men's ward. A large amount of filling was necessary in front of the administration building and women's ward. The special appropriation of \$1,500 was insufficient to complete all of the grading.

A coal bunker adjoining the boiler room, large enough to hold

20 tons of coal, has been built of concrete. The bakeroom has been enlarged by an addition 10 by 12 feet. This was made necessary by the installation of a large portable tile oven.

The farmhouse has been thoroughly repaired, piazzas added and plumbing installed. This now makes a very comfortable house of seven rooms and bath.

A shed near the farmhouse has been made into a dormitory for the teamsters and farm hands.

A covered corridor connecting the service and administration buildings has been built. The service building, administration building and the infirmary section of the wards have been screened.

Cold-storage rooms in the basement of the service building and a kitchen refrigerator have been built in, and a refrigerating machine installed. This furnishes sufficient ice for our use, and ample refrigeration for all purposes.

The outside of the barn has been shingled and the trimmings painted. A silo has been erected and filled with ensilage in anticipation of keeping some cows next year. Quite a good deal of work has been done on the interior of the barn.

The 15 kilowatt turbine generator is now being installed. This will be ready for use as an auxiliary within two weeks. A gasoline pump has been installed in the pump house for emergency use in case the electric pump gets out of order.

A piggery 135 by 26 feet has been erected and is now filled with 105 swine. Thirty-three of these hogs were purchased last spring. From these 72 pigs have been raised.

FARM.

Twenty acres of the best land had been under cultivation by the previous owner, and was allowed to grow up to weeds last year. This land and about 10 acres more was ploughed and planted with corn and potatoes, besides a small garden. One thousand bushels of ears of corn were harvested, and the remainder of the corn was cut up for ensilage, which filled our 80-ton silo. We raised 1,400 bushels of potatoes. Owing to the large amount of grading and other farm work necessary

last spring our garden was late in being planted. However, we raised a fair amount of late summer and winter vegetables. Although 30 acres of the best hay land was under cultivation, we cut 45 tons of hay.

WATER SUPPLY.

Although it has been a very dry season our water supply has been ample to meet our needs. The water analyses which have been made once a month by the State Board of Health show about the same condition that existed last spring, except that there has been a slight improvement in the amount of iron present.

I understand that the State Board of Health did not recommend the purchase of the neighboring farm last year, although they felt that that was the most probable source of contamination, because they were uncertain as to the well yielding sufficient water. Now that an ample supply of water has been obtained during the past very dry season, the State Board of Health in a letter to the trustees dated December 1, recommends the purchase of this farm, which is owned by Andrew Pignatare. The lowest price I have been able to obtain from him is \$3,500. There are about 40 acres of land, a dwelling house of six rooms and a barn. An additional \$500 would be needed to make repairs and provide some system of sewage disposal, or to remove the house to a location where the sewage would not contaminate our wells. The house could then be rented for \$15 a month to some of our married employees.

We are making alterations in the barn so that we shall be able to keep 33 cows. I would like to start our dairy with at least 20 cows. That would require an appropriation of \$1,500.

One thousand dollars will be needed to finish the grading about the buildings. This should be done as early as possible, as the sand from the rear of the men's ward blows into the buildings, causing a great deal of annoyance to the patients.

Dr. George L. Schadt, who has served efficiently as second assistant physician since March 2, resigned November 30 to go into private practice. Dr. Roy Morgan will succeed him as second assistant.

LABORATORY WORK.

Nine hundred and twenty-eight specimens of sputum have been examined. Of these, 441 were negative and 587 were positive. The sputum of 189 patients was positive on the first examination. In 30 other cases more than one specimen was examined before bacilli were found, as follows: Two specimens in 16 cases, three specimens in 7 cases, five specimens in 4 cases, six specimens in 1 case and seven specimens in 2 cases. In 1 case bacilli were not found in the sputum but were found in the fæces. Seventy-nine other patients had negative sputum on repeated examination, or had no expectoration. The Von Pirquet skin test was used in all these cases. If this reaction was doubtful, a subcutaneous tuberculin test was used. Only 5 persons out of the 371 persons admitted proved to be free from tuberculosis. The above figures indicate that in making a diagnosis of pulmonary tuberculosis but little weight can be placed on a negative sputum examination. Although some of our cases had extensive physical signs in their lungs, bacilli could be found only after repeated examinations.

Examinations of the blood of patients have been made to determine the effect of sanatorium life and treatment on the constituents of the blood; 247 white counts have been made; 9 red counts and 152 differential counts of the white cells. When sufficient material for a paper has been obtained, it is our intention to publish the findings.

ACKNOWLEDGMENTS.

I wish to express my appreciation for the cordial feeling toward the sanatorium which has been shown in many ways by the people of Westfield, and to gratefully acknowledge their interest in the work of the institution. The clergymen have willingly provided Sunday services whenever possible. Members of the Westfield Band and the choir of the Advent Church have given us concerts. Magazines and books have been generously contributed by the Women's Club of Brockton, and residents of Webster, Springfield, Westfield and Holyoke. A total

of 49 books have been given, which form a nucleus for our library.

To you, members of the Board of Trustees, I wish to express my gratitude for your support and confidence throughout the past year. The difficulties that arise in organizing a new institution have been made much easier by your advice and encouragement.

Respectfully submitted,

HENRY D. CHADWICK,
Superintendent.

Nov. 30, 1910.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1910: —

CASH ACCOUNT.

Receipts.

Institution Receipts.

Board of inmates: —

Private,	\$6,650 61	
Cities and towns,	3,860 06	
	<hr/>	\$10,510 67

Salaries, wages and labor: —

Wages not called for,	18 73
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Sales: —

Food,	\$7 10	
Clothing and materials,	4 65	
Furnishings,	3 23	
Miscellaneous,	219 82	
	<hr/>	234 80

Farm, stable and grounds: —

Pigs and hogs,	13 60
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Miscellaneous receipts: —

Interest on bank balances,	\$17 09	
Sundries,	3 80	
	<hr/>	20 89

\$10,798 69

Receipts from Treasury of Commonwealth.

Maintenance appropriations: —

Advance money (amount on hand November 30),	\$3,759 07	
Approved schedules of 1910,	\$61,292 63	
Less returned,	204 82	
	<hr/>	61,087 81
		<hr/> 64,846 88

Special appropriations,	\$14,109 38	
Less returned,	88 85	
	<hr/>	14,020 53

Total, \$89,666 10

Payments.

To treasury of Commonwealth, institution receipts,	\$10,798 69	
Maintenance appropriations: —		
Eleven months' schedules, 1910,	61,087 81	
November advances,	1,373 17	
		\$73,259 67
Special appropriations: —		
Approved schedules,		14,020 53
Balance Nov. 30, 1910: —		
In bank,	\$1,839 38	
In office,	546 52	
		2,385 90
Total,		\$89,666 10

MAINTENANCE.

Appropriation,	\$65,236 00
Expenses (as analyzed below),	67,089 52
Deficiency,	\$1,853 52

Analysis of Expenses.

Salaries, wages and labor: —		
General administration,	\$10,176 26	
Medical service,	3,676 07	
Ward service (male),	1,566 84	
Ward service (female),	1,806 91	
Farm, stable and grounds,	4,741 08	
		\$21,967 16
Food: —		
Butter,	\$2,267 11	
Butterine,	75 90	
Beans,	42 57	
Bread and crackers,	99 64	
Cereals, rice, meal, etc.,	292 38	
Cheese,	96 10	
Eggs,	2,264 79	
Flour,	1,278 64	
Fish,	604 08	
Fruit (dried and fresh),	1,085 69	
Meats,	7,300 14	
Milk,	3,939 01	
Molasses and syrup,	53 46	
Sugar,	452 66	
Tea, coffee, broma and cocoa,	200 04	
Vegetables,	996 65	
Sundries,	491 38	
		21,540 24
Clothing and materials: —		
Boots, shoes and rubbers,	\$8 25	
Clothing,	153 48	
Dry goods for clothing and small wares,	63 27	
Amounts carried forward,	\$225 00	\$43,507 40

<i>Amounts brought forward,</i>	\$225 00	\$43,507 40
<i>Clothing and material — Con.</i>		
Furnishing goods,	3 80	
Leather and shoe findings,	2 45	
Sundries,	35 81	
		267 06
<i>Furnishings: —</i>		
Beds, bedding, table linen, etc.,	\$2,081 76	
Brushes, brooms,	217 61	
Carpets, rugs, etc.,	92 75	
Crockery, glassware, cutlery, etc.,	1,001 99	
Furniture and upholstery,	1,745 76	
Kitchen furnishings,	626 85	
Wooden ware, buckets, pails, etc.,	125 13	
Sundries,	544 69	
		6,436 54
<i>Heat, light and power: —</i>		
Coal,	\$1,403 21	
Freight on coal,	1,573 67	
Wood,	62 64	
Oil,	33 52	
Sundries,	27 47	
		3,100 51
<i>Repairs and improvements: —</i>		
Brick,	\$5 00	
Cement, lime and plaster,	163 19	
Doors, sashes, etc.,	112 29	
Electrical work and supplies,	647 76	
Hardware,	191 39	
Lumber,	408 27	
Machinery, etc.,	145 91	
Paints, oil, glass, etc.,	489 19	
Plumbing, steam fitting and supplies,	865 81	
Roofing and materials,	135 43	
Sundries,	304 25	
		3,468 49
<i>Farm, stable and grounds: —</i>		
Blacksmith and supplies,	\$76 80	
Carriages, wagons, etc., and repairs,	123 62	
Fertilizers, vines, seeds, etc.,	952 34	
Hay, grain, etc.,	686 48	
Harnesses and repairs,	122 60	
Horses,	600 00	
Other live stock,	957 74	
Tools, farm machines, etc.,	256 71	
Sundries,	297 87	
		4,074 16
<i>Miscellaneous: —</i>		
Books, periodicals, etc.,	\$35 08	
Chapel services and entertainments,	27 18	
Freight, expressage and transportation,	548 32	
Funeral expenses,	55 00	
Hose, etc.,	156 10	
<i>Amounts carried forward,</i>	\$821 68	\$60,854 16

<i>Amounts brought forward,</i>	\$821 68	\$60,854 16
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Miscellaneous — *Con.*

Ice,	126 32	
Medicines and hospital supplies,	2,624 63	
Postage,	141 94	
Soap and laundry supplies,	935 14	
Stationery and office supplies,	476 48	
Travel and expenses (officials),	183 52	
Telephone and telegraph,	305 40	
Cuspidor supplies,	308 60	
Sundries,	311 65	
		6,235 36

Total expenses for maintenance,	\$67,089 52
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SPECIAL APPROPRIATIONS.

Appropriations for fiscal year,	\$15,750 00
Expended during the year (see statement annexed),	\$14,020 53
Reverting to treasury of Commonwealth,	1 91
	14,022 44
Balance Nov. 30, 1910,	\$1,727 56

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$2,385 90
November cash vouchers (paid from advance money),	1,373 17
Due from treasury of Commonwealth account	
November, 1910, schedule,	389 12
	\$4,148 19

Liabilities.

Schedule of November bills,	\$6,001 71
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Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Duplicate generator,	Acts 1910, chap. 124	\$1,500 00	\$467 01	\$467 01	\$1,032 99
Grading and road making,	Acts 1910, chap. 124	1,500 00	1,499 24	1,499 24	76 ¹
Repairs on old barn and purchase of cows,	Acts 1910, chap. 124	1,600 00	1,204 00	1,204 00	396 00
Furnishings and equipments,	Acts 1910, chap. 124	5,000 00	4,998 85	4,998 85	1 15 ¹
Ice plant,	Acts 1910, chap. 124	2,500 00	2,500 00	2,500 00	—
Coal bunkers, repairs on farmhouse, a piggery, poultry and henneries, farm tools, corridor and walks, and screens,	Acts 1910, chap. 124	3,650 00	3,351 43	3,351 43	298 57
		\$15,750 00	\$14,020 53	\$14,020 53	\$1,727 56

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

HENRY D. CHADWICK,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

Real estate:—

Cultivated land, 62 acres; wood land, 40 acres; pasture, 28 acres; administration building, service building, four ward buildings, piggery, barn, farmhouse and power plant,	\$91,700 00
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Personal estate:—

Live stock on farm,	\$3,300 00
Produce of the farm on hand,	2,216 00
Carriages and agricultural implements,	1,835 00
Machinery and mechanical fixtures,	5,400 00
Beds and bedding,	4,760 00
Other furniture,	4,207 00
Personal property of State in superintendent's department,	375 00
Dry goods,	750 00
Provisions and groceries,	1,344 00
Drugs and medicines,	100 00
Fuel,	50 00
Library,	25 00
Other supplies, undistributed,	240 00
	<hr/>
	24,602 00
	<hr/>
	\$116,302 00

LIST OF SALARIED OFFICERS AND EMPLOYEES.

Superintendent (per year),	\$2,500 00
First assistant physician (per year),	1,400 00
Second assistant physician (per year),	900 00
Matron (per year),	900 00
Chief engineer (per year),	1,000 00
Chef (per month),	75 00
Second cook (per month),	35 00
Baker (per month),	60 00
Storekeeper (per month),	30 00
Four kitchen workers (per month),	\$20 00 to 25 00
Five waiters (per month),	20 00 to 25 00
Seven domestics (per month),	15 00 to 20 00
Three head nurses (per month),	40 00
Four graduate nurses (per month),	35 00
Six attendants and orderlies (per month),	\$20 00 to 30 00
Bookkeeper (per month),	45 00
Stenographer (per month),	35 00
Four stablemen and teamsters (per month),	30 00
Four laborers (per day) (without board),	1 75
Four laundry employees (per month),	\$20 00 to 40 00
Three assistant engineers (per month),	50 00 to 60 00
One fireman (per month),	50 00
Foreman (per month),	75 00
Housekeeper (per month),	35 00
One general worker (per month),	35 00
Telephone operator (per month),	20 00

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number received during the year,	202	169	371
Number passing out of the institution during the year, .	126	88	214
Number at the end of the fiscal year in the institution, .	78	79	157
Daily average attendance (number of inmates actually present) during the year.	65.4	63	128.4
Average number of employees and officers during the year, .	35	22	57

Expenditures.

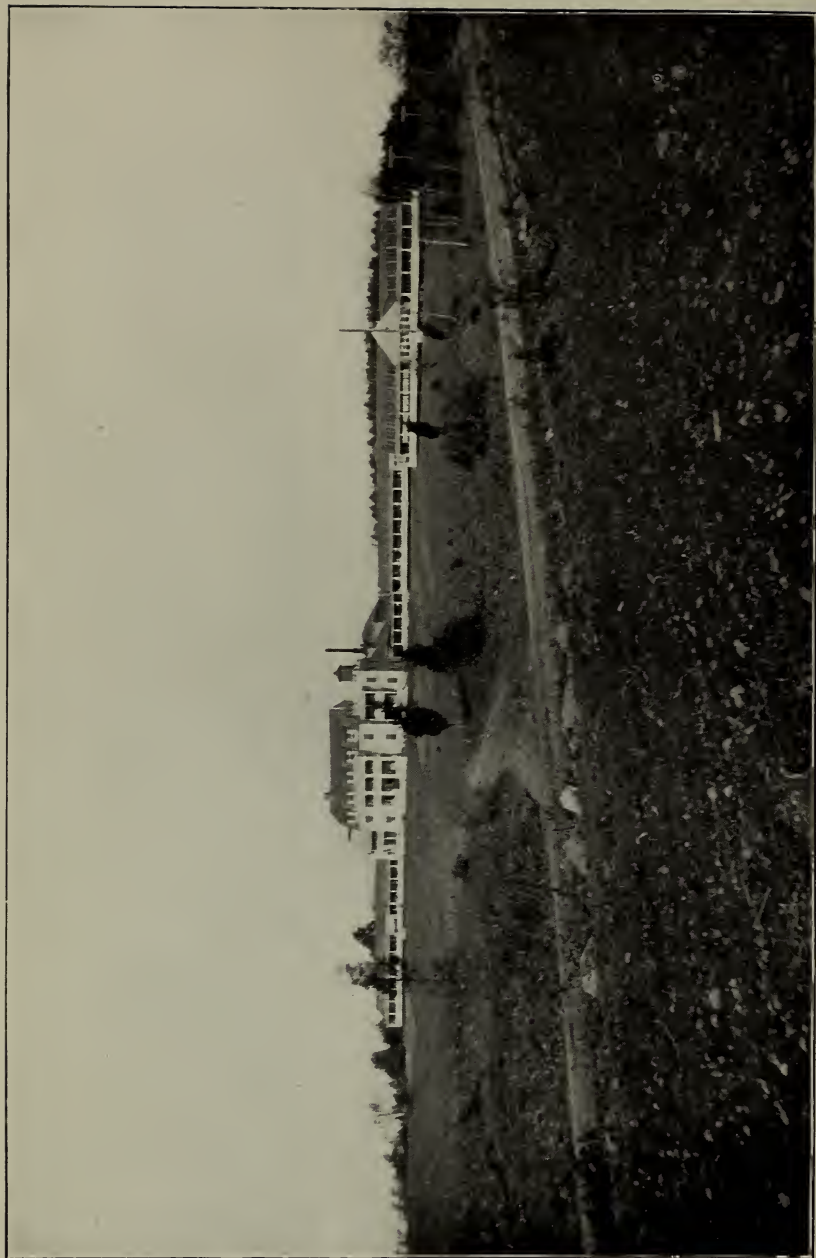
Current expenses:—

1. Salaries and wages,	\$21,967 16	
2. Clothing,	267 06	
3. Subsistence,	21,540 24	
4. Ordinary repairs,	3,468 49	
5. Office, domestic and out-door expenses,	19,846 57	
Total,	—————	\$67,089 52

Extraordinary expenses:—

1. New buildings, land, etc.,	\$3,088 09	
2. Permanent improvements to existing buildings,	11,314 54	
Total,	—————	14,402 63

Grand total,		—————	\$81,492 15
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WESTFIELD STATE SANATORIUM.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted, February 16 to November 30, inclusive.	202	169	371
Number of patients discharged, February 16 to November 30, inclusive.	126	88	214
Number of deaths (included in preceding item), . . .	35	19	54
Number remaining in sanatorium November 30, . . .	78	79	157
Daily average number of patients,	—	—	128.4
Daily average number of patients since June 1, . . .	—	—	150.4

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	97	91	188
Single,	97	66	163
Widowed,	8	11	19
Divorced,	—	1	1
Totals,	202	169	371

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
1 to 14 years,	1	12	13
14 to 20 years,	24	33	57
20 to 30 years,	65	72	137
30 to 40 years,	61	34	95
40 to 50 years,	31	7	38
Over 50 years,	20	11	31
Totals,	202	169	371

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
United States: —									
Massachusetts,	76	16	13	58	14	19	134	30	32
New England States,	16	10	8	12	10	7	28	20	15
Other States,	11	2	6	7	5	9	18	7	15
Total native,	103	28	27	77	29	35	180	57	62
Other countries: —									
Austria,	4	3	4	3	2	2	7	5	6
Canada,	19	17	17	20	17	20	39	34	37
Cuba,	—	—	—	1	—	—	1	—	—
England,	10	7	7	3	10	6	13	17	13
Finland,	10	6	5	5	3	4	15	9	9
France,	1	1	—	—	—	—	1	1	—
Germany,	—	2	2	—	8	6	—	10	8
Greece,	1	1	1	—	—	—	1	1	1
Ireland,	19	36	34	18	33	31	37	69	65
Italy,	2	2	2	2	2	2	4	4	4
Judea,	—	1	—	—	—	—	—	1	—
Norway,	—	—	—	1	1	1	1	1	1
Roumania,	1	—	—	—	—	—	1	—	—
Russia,	16	10	9	4	4	4	20	14	13
Scotland,	3	3	5	2	3	1	5	6	6
Sweden,	8	9	9	7	6	6	15	15	15
Syria,	1	—	—	—	—	—	1	—	—
Switzerland,	—	2	—	—	—	—	—	2	—
Turkey,	2	1	1	—	—	—	2	1	1
Wales,	—	—	—	—	1	—	—	1	—
Unknown,	2	73	79	26	50	51	28	123	130
Total foreign,	202	202	202	169	169	169	371	371	371

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Adams,	10	Ludlow,	2
Aldenville,	1	Lynn,	5
Allston,	2	Marlborough,	3
Amherst,	1	Medford,	1
Ashby,	1	Melrose,	2
Baldwinville,	2	Milford,	2
Barnstable,	1	Millville,	1
Berkshire,	1	Milton,	1
Blackstone,	1	Mittineague,	1
Boston,	42	Monson,	4
Brockton,	1	New Bedford,	2
Cambridge,	2	Newton Highlands,	1
Charlton City,	2	North Adams,	7
Chelsea,	2	Northampton,	4
Cheshire,	1	North Grafton,	1
Chester,	1	Norwood,	2
Chicopee,	10	Orange,	2
Dalton,	1	Pittsfield,	8
Dudley,	1	Palmer,	1
East Northfield,	1	Quincy,	1
East Pepperell,	1	Readville,	1
Everett,	1	Salem,	2
Fitchburg,	18	Somerville,	7
Florence,	2	South Ashburnham,	1
Gardner,	11	South Framingham,	1
Great Barrington,	6	Southborough,	2
Greenfield,	2	Southbridge,	7
Groton,	1	Springfield,	36
Hartsville,	1	Sterling,	1
Haverhill,	4	Stoneham,	1
Haydenville,	1	Turner's Falls,	1
Holyoke,	26	Waltham,	2
Hudson,	1	Ware,	1
Huntington,	1	Webster,	2
Hyde Park,	1	Westborough,	1
Lancaster,	1	Westfield,	15
Leominster,	2	Westminster,	1
Lowell,	2	Weston,	1

TABLE 5. — *Residence of Patients admitted* — Concluded.

PLACE.	Number.	PLACE.	Number.
West Lynn,	1	Winchester,	1
West Springfield,	1	Winthrop,	1
West Townsend,	1	Worcester,	64
Willimansett,	2	Total,	371

TABLE 6. — *Occupations.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Artist,	1	-	1	Grocer,	1	-	1
Attendant,	1	-	1	House cleaner,	-	1	1
Barber,	2	-	2	Housekeeper,	-	66	66
Bartender,	2	-	2	Houseworker,	1	16	17
Blacksmith,	3	-	3	Insurance agent,	1	-	1
Bookkeeper,	1	1	2	Janitor,	1	-	1
Bronzer,	1	-	1	Laborer,	16	-	16
Butcher,	1	-	1	Laundryman,	1	-	1
Carpenter,	4	-	4	Lithographer,	1	-	1
Cashier,	3	-	3	Machinist,	8	-	8
Charwoman,	-	1	1	Manicurist,	-	1	1
Cigar binder,	-	1	1	Merchant,	1	-	1
Clerk,	10	7	17	Mill,	16	20	36
Compositor,	-	1	1	Milliner,	-	2	2
Conductor,	2	-	2	Motorman,	2	-	2
Cook,	1	1	2	No work,	1	7	8
Coppersmith,	1	-	1	Office boy,	1	-	1
Designer,	1	-	1	Oysterman,	1	-	1
Dressmaker,	-	1	1	Painter,	4	-	4
Engineer,	1	-	1	Paper hanger,	2	-	2
Electrician,	3	-	3	Plumber,	1	-	1
Electrotypist,	1	-	1	Porter,	1	-	1
Elevator man,	1	-	1	Printer,	1	-	1
Factory,	14	9	23	Brakeman,	1	-	1
Farmer,	3	-	3	Sailor,	1	-	1
Foundry,	2	-	2	Section hand,	2	-	2
Gardener,	2	-	2	Shoemaker,	7	5	12

TABLE 6. — *Occupations — Concluded.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Signal service,	1	-	1	Telephone operator, . .	-	1	1
Slater,	1	-	1	Tinsmith,	1	-	1
Social worker,	-	1	1	Traveling salesman, . .	1	-	1
Steam fitter,	2	-	2	Waiter,	3	8	11
Stenographer,	-	2	2	Wire maker,	6	-	6
Stoneworker,	11	-	11	Window decorator, . .	1	-	1
Student,	7	11	18	Upholsterer,	1	-	1
Steward,	2	-	2	Woodworker,	4	-	4
Tailor,	4	-	4	Unknown,	9	2	11
Teamster,	11	-	11	Totals,	202	169	375
Lineman,	1	-	1				

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	31	38	69
Moderately advanced,	43	48	91
Far advanced,	126	78	204
Unclassified,	2	-	2
Nontuberculous,	-	5	5
Totals,	202	169	371

TABLE 8. — *Condition on Discharge.*

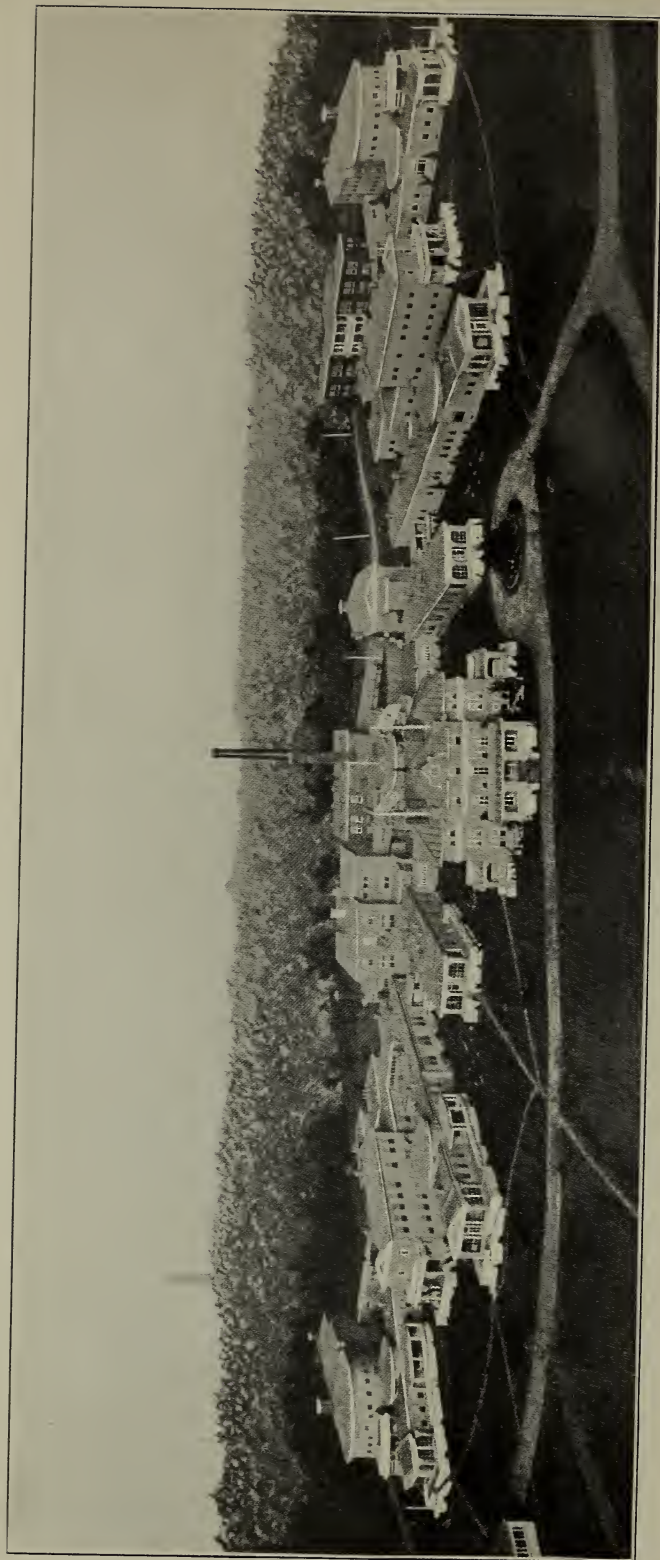
	Males.	Females.	Totals.
Disease arrested,	31	25	46
Improved,	18	13	31
Unimproved,	33	16	49
Died,	35	19	54
Nontuberculous,	-	3	3
Not considered,	19	12	31
Totals,	126	88	214

TABLE 9. — *Deaths.*

	DURATION OF DISEASE.			SANATORIUM RESIDENCE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	9	6	15
1 to 3 months,	2	2	4	14	3	17
3 to 6 months,	2	2	4	8	9	17
6 to 9 months,	5	-	5	4	1	5
9 months to 1 year,	-	-	-	-	-	-
1 to 2 years,	17	10	27	-	-	-
2 to 5 years,	5	3	8	-	-	-
5 to 10 years,	2	2	4	-	-	-
10 to 15 years,	1	-	1	-	-	-
Unknown,	1	-	1	-	-	-
Totals,	35	19	54	35	19	54

TABLE 10. — *Causes of Death.*

	Males.	Females.	Totals.
Phthisis,	33	19	52
Valvular disease of heart,	2	-	2
Totals,	35	19	54



RUTLAND STATE SANATORIUM.

RUTLAND STATE SANATORIUM.

CONSULTING PHYSICIANS.

HERBERT C. CLAPP, M.D., BOSTON.

EDWARD O. OTIS, M.D., BOSTON.

CONSULTING LARYNGOLOGIST.

A. C. GETCHELL, M.D., WORCESTER.

RESIDENT MEDICAL OFFICERS.P. CHALLIS BARTLETT, M.D., . . . *Superintendent.*JAMES A. LYON, M.D., *Physician.*JOHN M. WISE, M.D., *Physician.*HERBERT F. GAMMONS, M.D., . . . *Physician.*CLARENCE MURPHY, *Bacteriologist.*E. RAY BURNHAM, M.D., *Laboratory Assistant.*

MARY E. THRASHER, *Matron and Superin-*
*tendent of Nurses.*CHARLES E. CARROLL, *Steward.*WALTER C. BROWN, *Chief Engineer.*FREDERICK H. DRURY, *Farmer.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

LADIES AND GENTLEMEN:— I have the honor to submit the following report for the year ending Nov. 30, 1910.

There was a daily average of 340 patients during the year. There were 762 patients admitted and 758 patients discharged. This includes 12 deaths, — 9 men and 3 women.

The total expenditure for the year was \$187,963.11, which, with a daily average of 340 patients, makes the per capita cost \$10.598. Deducting from the total amount expended the amount received from the sale of supplies (\$3,742.47), and adding the decrease of the supplies on hand from the inventory of the previous year (\$541.46), gives us a per capita cost of \$10.416.

The increased expense for 1910 was largely due to the hiring of extra employees, made necessary because of the elimination of the custom of patients working for their board. There was also an increase in the farm expense during the past year because of the poor harvest in 1909 of both hay and ensilage.

RESIDENCE.

This year the table giving the counties from which patients were admitted has been left out and the table giving the cities and the towns has been substituted. Boston furnished 235 patients, or 30.84 per cent.

AGE.

The average age of the men admitted was twenty-seven years and eight months; of the women admitted, twenty-seven years and seven months.

There is still a constant inquiry relative to the admission of

children. During the last year there were not any children admitted under fourteen years of age, and with the large number of patients that we have I do not believe it advisable to admit any under this age.

RESULTS OF TREATMENT.

The average sanatorium residence was 5 months and 23 days, 17 days less than last year. There are in the house 22 patients that have been here over a year.

The number of incipient cases that have been discharged as apparently cured is considerably less than last year, chiefly due to the decreased length of stay. There were 94 nonconsidered cases during the year. These are cases that stayed in the sanatorium less than six weeks. There were 120 far-advanced cases admitted, — 12 more than last year. The number of advanced cases has increased steadily during the past few months.

During the month of November we have had under treatment more patients than at any time since the sanatorium opened, the daily average being 348 cases.

The average gain in weight of the considered cases is as follows: men, 15 pounds; women, 12.5 pounds. Largest individual gain: a man, 65½ pounds; a woman, 42½ pounds.

LABORATORY.

There has been a great deal of laboratory work done during the past year and of a varied nature. As this part of the work seems important, I will give a little résumé of what has been done. There have been 116 autogenous bacterial vaccines made, and in some cases where these have been used the opsonic index has been taken. Faeces were examined for tubercle bacilli in 56 cases, with some animal inoculations.

There were 122 special urinary analyses and microscopic examinations, including quantitative determination of total solids, urea, chlorides and total nitrogen in a small per cent. of cases.

Work has been started to study tissue changes in animals that have been given tuberculin subcutaneously. Various kinds of tuberculin have been used in regularly increasing doses.

Sixty blood examinations have been made, including red and white and differential counts. The sputum of each patient is examined regularly every month. The sputum examinations will average 400 a month. Besides this there have been 100 special examinations for tubercle bacilli and associated organisms.

There are also regular chemical analyses made of milk and cream that we purchase, and during the summer months the milk and cream are examined bacterially.

IMPROVEMENTS.

The nurses' home was finished during the spring and was occupied June 11. The verandas on the east side of the infirmary (second floor) have been roofed in, also the veranda on the second floor of ward L.

There are always a great number of repairs in buildings of this kind and I believe we will need to do more next year than we did last.

IMPROVEMENTS DESIRED.

There has been a constant increase in the number of electric lights because of new buildings. Last year the electric plant was overloaded, and since that time we have added the new nurses' home. This greatly overloads our generator. For the purpose of taking care of this overload we need 1 150 kilowatt dynamo and engine. To do this work we would require \$4,840.

Last year the State Board of Health recommended the relaying of 1,900 feet of Akron sewer pipe with iron pipe. For this purpose we need \$1,975.

The new nurses' home has no hydrant near it. This hydrant is needed, also some new hose and fire extinguishers. We need for this purpose \$400.

The mile of road across the sanatorium grounds has a great deal of teaming over it. This road needs repairing and part of it will have to be entirely rebuilt. The State engineer's office last year estimated that this would cost \$1,400.

The present horse barn is badly out of repair. We also need carriage room and a place to store farm implements. The old buildings are also very unsightly. Plans and specifications for this barn were made last year. The figures obtained from the

contractor show that it would cost \$8,950 to build this barn of wood.

In the present carpenter shop we have no machinery. With a plant of this size we are constantly needing all kinds of wood finish. At the present time we have to send several miles to have even the smallest piece of mill work done. This is expensive. I recommend an addition to the carpenter shop for the purpose of installing woodworking machinery. This would cost \$700. The machinery, including a drill for ironwork, would cost \$835.

The infirmary veranda space is not large enough to accommodate all the patients. I recommend its extension. This would cost \$965.

There has been a steady increase in the number of infirmary cases. Upper and lower L, with their annexes, seem suitable for an infirmary. The kitchen could be made in the basement. These changes, with the furnishings, would cost \$1,255.

The present infirmary has an operating room on the second floor. We also have to carry all of our very sick women patients up the stairs. I recommend the installation of an elevator, at a cost of \$1,500.

The increase in the number of very sick patients frequently makes it necessary to carry a patient back and forth to the station on a cot. We have no wagon suitable for this work. I recommend the purchase of an ambulance, at a cost of \$450.

The walk between the administration building and center is covered with tin and a wooden walk placed on this. There is a constant expense to keep this in repair. I recommend that this be covered with tar concrete, at an expense of \$150.

TRAINING SCHOOL.

The training school has been carried on successfully and at present there are 10 young ladies taking the course. There seems to be a constant demand for nurses who have been trained in tuberculosis work.

MEDICAL SERVICE.

In September Dr. Geo. N. Lapham resigned, to take up private practice. Dr. Lapham has been here as assistant physician since Jan. 1, 1901. His skill as a medical officer and his long service made him a valuable man for the sanatorium. His resignation was regretted by all who knew him.

Dr. John M. Wise was appointed as assistant physician during the early part of the year, and took up his work January 8.

On the resignation of Dr. Lapham in September Dr. Gammons, who had served as an interne for a year, was appointed as assistant physician.

We are greatly indebted to the many friends of the sanatorium for their unfailing generosity, and to the patients themselves, who are always ready to help forward the work of the institution.

The unfailing support which I have received from the officers and employees has made possible whatever measure of success we have attained.

For the assistance and support of your Board I am deeply grateful.

Respectfully submitted,

P. CHALLIS BARTLETT.

Nov. 30, 1910.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1910:—

CASH ACCOUNT.

Balance Dec. 1, 1909,	\$4,276 29
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*Receipts.**Institution Receipts.*

Board of inmates:—

Private,	\$38,467 85	
Reimbursements (charitable association),	1,500 05	
Cities and towns,	10,397 92	
Soldiers' relief (State aid and minors),	571 05	
	<hr/>	\$50,936 87

Salaries, wages and labor:—

Wages not called for,	46 47
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Sales:—

Food,	\$1,595 61	
Clothing and materials,	126 45	
Furnishings,	61 23	
Heat, light and power,	2 40	
Repairs and improvements,	118 21	
Miscellaneous,	1,792 10	
	<hr/>	3,696 00

Farm, stable and grounds:—

Cows and calves,	\$252 50	
Pigs and hogs,	2,195 12	
Sundries,	2 85	
	<hr/>	2,450 47

Miscellaneous receipts:—

Interest on bank balances,	\$159 99	
Sundries,	15 00	
	<hr/>	174 99

57,304 80
Receipts from Treasury of Commonwealth.

Maintenance appropriations:—

Balance of 1909,	\$6,573 94	
Advance money (amount on hand November 30),	8,500 00	
Approved schedules of 1910,	175,366 14	
	<hr/>	190,440 08

Special appropriations,	9,296 44
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Total,	<hr/>	\$261,317 61
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Payments.

To treasury of Commonwealth, institution receipts,	\$57,304	80	
Maintenance appropriations: —			
Balance November schedule, 1909,	10,969	38	
Eleven months' schedules, 1910,	175,366	14	
November advances,	5,933	08	
			<hr/>
			\$249,573 40
Special appropriations: —			
Approved schedules (\$9,296.44 less advances of November, 1909, \$119.15),			9,177 29
Balance Nov. 30, 1910: —			
In bank,	\$589	05	
In office,	1,977	87	
			<hr/>
			2,566 92
Total,			<hr/>
			\$261,317 61

MAINTENANCE.

Appropriation,	\$184,000	00
Expenses (as analyzed below),	187,963	11
		<hr/>
Deficiency,	\$3,963	11

Analysis of Expenses.

Salaries, wages and labor: —			
General administration,	\$39,472	84	
Medical service,	4,594	60	
Ward service (male),	1,344	39	
Ward service (female),	5,824	25	
Repairs and improvements,	3,156	68	
Farm, stable and grounds,	7,717	02	
			<hr/>
			\$62,109 78
Food: —			
Butter,	\$6,931	57	
Butterine,	381	75	
Beans,	122	12	
Bread and crackers,	88	77	
Cereals, rice, meal, etc.,	821	31	
Cheese,	125	70	
Eggs,	9,615	19	
Flour,	2,136	62	
Fish,	1,994	42	
Fruit (dried and fresh),	2,484	18	
Meats,	36,072	09	
Milk,	9,713	26	
Molasses and syrup,	42	58	
Sugar,	1,867	23	
Tea, coffee, broma and cocoa,	1,098	20	
Vegetables,	3,790	64	
Sundries,	428	63	
			<hr/>
			77,714 26
Amount carried forward,			<hr/>
			\$139,824 04

<i>Amount brought forward,</i>		\$139,824 04	
Clothing and materials: —			
Boots, shoes and rubbers,	\$5 00		
Furnishing goods,	25		
			5 25
Furnishings: —			
Beds, bedding, table linen, etc.,	\$2,171 06		
Brushes, brooms,	266 31		
Carpets, rugs, etc.,	63 50		
Crockery, glassware, cutlery, etc.,	751 28		
Furniture and upholstery,	788 32		
Kitchen furnishings,	427 17		
Wooden ware, buckets, pails, etc.,	39 30		
Sundries,	277 35		
			4,784 29
Heat, light and power: —			
Coal,	\$12,465 92		
Wood,	21 50		
Teaming coal,	1,685 62		
Oil,	252 87		
Sundries,	436 90		
			14,862 81
Repairs and improvements: —			
Cement, lime and plaster,	\$106 65		
Doors, sashes, etc.,	60 00		
Electrical work and supplies,	257 28		
Hardware,	401 51		
Lumber,	412 41		
Machinery, etc.,	92 40		
Paints, oil, glass, etc.,	673 09		
Plumbing, steam fitting and supplies,	1,249 83		
Roofing and materials,	6 90		
Sundries,	59 55		
			3,319 62
Farm, stable and grounds: —			
Blacksmith and supplies,	\$168 15		
Carriages, wagons, etc., and repairs,	78 20		
Fertilizers, vines, seeds, etc.,	1,330 73		
Hay, grain, etc.,	6,082 71		
Harnesses and repairs,	51 95		
Horses,	240 00		
Other live stock,	434 93		
Tools, farm machines, etc.,	235 75		
Sundries,	1,228 00		
			9,850 42
Miscellaneous: —			
Books, periodicals, etc.,	\$120 10		
Chapel services and entertainments,	505 00		
Freight, expressage and transportation,	969 72		
Hose, etc.,	6 50		
Medicines and hospital supplies,	3,181 65		
Medical attendance, nurses, etc. (extra),	135 00		
<i>Amounts carried forward,</i>	\$4,917 97	\$172,646 43	

<i>Amounts brought forward,</i>	\$4,917 97	\$172,646 43
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Miscellaneous — *Con.*

Examining applicants,	1,411 33	
Postage,	440 54	
Printing and printing supplies,	636 75	
Printing annual report,	.	.	.	.	167 90	
Cuspidor supplies,	.	.	.	.	1,656 98	
Soap and laundry supplies,	.	.	.	.	1,237 20	
Stationery and office supplies,	.	.	.	.	739 39	
Travel and expenses (officials),	.	.	.	.	244 63	
Telephone and telegraph,	.	.	.	.	923 53	
Water,	2,394 47	
Sundries,	545 99	
					<hr/>	15,316 68

Total expenses for maintenance,	\$187,963 11
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SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1909,	\$9,415 86
Expended during the year (see statement annexed),					\$9,296 44	
Reverting to treasury of Commonwealth,	.	.			119 42	
					<hr/>	\$9,415 86

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	.	.	.	.	.	\$2,566 92
November cash vouchers (paid from advance money),					5,933 08	
Due from treasury of Commonwealth account						
November, 1910, schedule,	133 86	
					<hr/>	\$8,633 86

Liabilities.

Schedule of November bills,	\$12,596 97
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Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Constructing and furnishing nurses' home,	Res. 1909, chap. 77	\$15,000 00	\$7,584 04	\$14,880 97	\$119 03 ¹
Additional piazzas,	Res. 1909, chap. 77	2,000 00	1,402 40	1,999 63	37 ¹
Purchase of cows,	Res. 1909, chap. 77	1,400 00	310 00	1,399 98	02 ¹
		\$18,400 00	\$9,296 44	\$18,280 58	\$119 42

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

P. CHALLIS BARTLETT,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

By valuation of William C. Temple and Louis M. Hanff on the nineteenth day of December, 1910.

Real estate:—

Roadway and sewer beds, 21 acres at \$100,	\$2,100 00	
Cultivated land, 120 acres at \$90,	10,800 00	
Woodland, 90 acres at \$32,	2,880 00	
Pasturage, 122 acres at \$22,	2,684 00	
Lawn, 12 acres at \$500,	6,000 00	
		<hr/>
		\$24,464 00

Buildings:—

Nihin house,	\$900 00	
Old farmhouse,	2,200 00	
New farmhouse,	4,000 00	
Farm barns and outbuildings,	1,500 00	
Silo,	200 00	
Piggery,	1,320 00	
New cow barn,	9,000 00	
Hennerly,	1,500 00	
Carpenter shop,	500 00	
Coal trestle,	1,600 00	
Pavilion,	1,700 00	
Institution building and present fixtures,	428,300 00	
Nurses' home,	14,881 00	
Roads and sewerage system,	20,000 00	
		<hr/>
		487,601 00

Personal estate:—

Live stock on farm,	\$9,194 25	
Produce of the farm on hand,	2,277 10	
Carriages and agricultural implements,	1,338 00	
Machinery and mechanical fixtures,	1,800 00	
Beds and bedding in inmates' department,	8,000 00	
		<hr/>
<i>Amounts carried forward,</i>	<i>\$22,609 35</i>	<i>\$512,065 00</i>

Amounts brought forward, . . . \$22,609 35 \$512,065 00

Personal estate — *Con.*

Other furniture in inmates' department,	9,500 00	
Personal property of State in superintendent's department,	1,500 00	
Ready-made clothing,	250 00	
Dry goods,	1,691 72	
Provisions and groceries,	1,144 39	
Drugs and medicines,	758 27	
Fuel,	1,728 00	
Library,	1,000 00	
Other supplies undistributed, . .	853 60	
	<hr/>	41,035 33
Total,		<hr/> \$553,100 33

FARM ACCOUNT.

Dr.

Products of the farm on hand, as estimated Dec. 1, 1909,	\$2,401 40	
Stock on hand, as estimated Dec. 1, 1909,	367 79	
		<hr/> \$2,769 19

General expense:—

Blacksmith,	\$103 25	
Coal,	42 08	
Fertilizer,	1,232 61	
Hardware,	7 23	
Harness repairs,	67 05	
Hay and grain,	4,750 91	
Horse,	240 00	
Shavings,	154 17	
Sundries,	144 74	
Teaming (outside),	720 62	
Tools, etc.,	85 86	
Wagon repairs,	13 00	
Labor,	6,119 88	
		<hr/> \$13,681 40

Material, etc., produced by other departments
of sanatorium for farm department:—

Board of employees,	\$1,612 50	
Carpenter department,	7 81	
Engineer department,	30 88	
Painter department,	6 46	
Waste, sanatorium kitchen,	200 00	
		<hr/> 1,857 65
		<hr/> 15,539 05
		<hr/> \$18,308 24

Cr.

Produce of farm delivered to sanatorium:—

Apples, 25 barrels, at \$1.75 to \$2.50,	\$47 04	
Beans (shell), 27½ bushels, at \$0.70 to \$1.25,	24 65	
Beans (wax), 48 bushels, at \$0.60 to \$1.00,	37 65	
Beets, 103 bushels, at \$0.65 to \$1.00,	76 95	
Cabbage, 5,424 pounds, at \$0.00¾ to \$0.01¾,	54 28	
Carrots, 153 bushels, at \$0.60 to \$1.75,	105 75	
Cauliflower, 126 dozen, at \$0.90 to \$3.00,	184 65	
Cucumbers, 35 bushels, at \$1.00 to \$1.75,	40 51	
Cucumbers (small), 993 dozen, at \$0.046,	45 67	
Celery, 13 bushels, at \$0.50,	6 50	
Corn, 332½ dozen, at \$0.08 to \$0.12,	38 08	
		<hr/>

Amount carried forward, \$661 73

Amount brought forward, \$661 73

Produce of farm delivered to sanatorium — *Con.*

Hay, 157 pounds,	1 61
Leeks, 66½ dozen, at \$0.50,	33 25
Lettuce, 191 dozen, at \$0.25 to \$0.50,	72 72
Milk, 125,438 quarts, at \$0.04½,	5,644 72
Onions, 25½ bushels, at \$0.45 to \$0.85,	18 65
Onion top, 600 bushels, at \$0.01½,	10 02
Parsley, 17 pecks, at \$0.40 to \$0.50,	6 85
Parsnips, 28 bushels, at \$1.00,	28 00
Pork, 7,203 pounds, at \$0.11 to \$0.14,	909 61
Peas, 18½ bushels, at \$1.25 to \$1.50,	25 63
Peppers, 4½ bushels, at \$0.65 to \$0.75,	3 82
Potatoes, 178 bushels, at \$0.57½ to \$0.60,	104 38
Radishes, 1,105 bunches, at \$0.20 dozen,	16 73
Rhubarb, 1,046 pounds, at \$0.02,	20 92
Squash, 14,884 pounds, at \$0.01 to \$0.01½,	219 88
Squash (summer), 127 dozen, at \$0.40 to \$0.50,	53 37
Spinach, 1 peck,	05
Tomatoes, 204 bushels, at \$0.40 to \$1.00,	117 10
Turnips, 86 bushels, at \$0.50 to \$0.75,	46 45

\$7,995 49

Sales: —

Live stock, hogs,	\$113 00
Live stock, cows and calves,	252 50
Pork, 25,190 pounds,	2,082 12
Corn,	2 85

2,450 47

Sanatorium, board of driving and express horses,

5 at \$20, 12 months, \$1,200 00

Service, labor and teaming for sanatorium, putting

in ice, hauling provisions, filter beds, etc., 2,266 43

3,466 43

Stock: —

Products of farm on hand, as estimated Dec. 1, 1910, \$2,277 10

Stock on hand Dec. 1, 1910, 314 26

2,591 36

\$16,503 75

Deficit against farm, \$1,804 49

POULTRY DEPARTMENT.

		DR.	
Stock,			\$951 65
General expense: —			
Grain and feed,	\$1,387	44	
Poultry,	440	34	
Water,	4	90	
Salaries and wages,	667	82	
Repairs and improvements: —			
Lumber,	48	13	
Wire netting,	26	95	
Steam fittings,	4	65	
Hardware,		40	
Sundries: —			
Oil,	16	47	
Machinery,	35	60	
Straw,	20	52	
Coal,	21	97	
Sundries,	14	84	
			<u>\$2,690 03</u>
Material, etc., produced by other departments of sanatorium for poultry department: —			
Board of employees,	\$417	06	
Engineer department (labor),	3	79	
Patient board workers,	73	68	
Farm department (teaming),	49	50	
Farm department (mangles),	1	80	
			<u>545 83</u>
			<u>3,235 86</u>
			<u>\$4,187 51</u>

CR.

Products of poultry department delivered to sanatorium: —

Poultry, 2,616 pounds,	. . . . .	\$455 15	
Eggs, 6,288 dozen,	. . . . .	1,852 77	
Fertilizer, 219 barrels,	. . . . .	104 50	
49 loads,	. . . . .	36 75	
		<hr/>	\$2,449 17

Stock: —

Sundries,	. . . . .	\$35 45	
Grain, etc.,	. . . . .	30 82	
Poultry,	. . . . .	1,083 00	
		<hr/>	1,149 27
			<hr/>
			\$3,598 44

Deficit against poultry department, \$589 07

LIST OF SALARIED OFFICERS AND EMPLOYEES.

Superintendent and treasurer (per annum), . . .	\$2,500 00
Physician (per annum),	1,100 00
Physician (per annum),	1,000 00
Physician (per annum),	800 00
Matron (per annum),	1,200 00
Steward (per annum),	1,500 00
Chief engineer (per annum),	1,200 00
Farmer (per annum),	900 00
Bookkeeper (per week, without living),	9 25
Stenographer (per week),	9 25
Office assistant (per week, without living),	6 90
Clerk (female, per week),	5 75
Clerk (male, per week, without living),	9 25
Pharmacist (per week),	4 00
Bacteriologist (per week),	11 50
Nurses (per week),	\$6 90 to 9 25
Nurses (night, per week),	9 25
Attendants (per week),	\$2 75 to 5 75
Night attendants (per week, without living),	11 05
Cook (per week, without living),	19 60
Assistant cook (per week),	9 25
Baker (per week, without living),	18 45
Supervisors (male, per week),	\$5 00 to 9 25
Supervisors (female, per week),	4 00 to 7 00
General work (male and female, per week),	2 75 to 5 75
Storekeeper (per week),	11 50
Storeroom helpers (per week),	\$3 00 to 5 00
Engineer and fireman (per week, without living),	13 85
Engineer (per week, without living),	15 00
Fireman (per week),	\$6 90 to 8 05
Laundress (per week),	9 00
Laundry help (male, per week),	\$3 50 to 7 00
Laundry help (female, per week),	3 25 to 5 50
Kitchen help (per week),	3 45 to 5 45
Butcher (per week, without living),	8 05
Waiters (per week),	\$3 45 to 5 75
Waitress (per week),	3 45

Serving rooms (male, per week),	\$3 45 to 4 40
Serving rooms (female, per week),	3 45
Diet kitchen help (per week),	\$2 75 to 5 75
Expressman (per day, without living),	1 75
Coachman (per week),	\$3 45 to 6 90
Farm help (per week),	5 75 to 6 90
Farm help (per day, without living),	1 75 to 2 00
Poultry manager (per week),	10 35
Carpenters (per day, without living),	\$2 70 to 3 00
Carpenter (per week),	7 00
Painter (per day, without living),	2 50

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of patients present at beginning of fiscal year, .	184	162	346
Number received during year,	396	366	762
Number discharged during year,	402	356	758
Number of deaths included in preceding item,	9	3	12
Number at end of fiscal year,	178	172	350
Daily average attendance (i.e., number of inmates actually present) during year.	179	161	340
Average number of officers and employees during the year, .	122	66	188

Expenditures.

Current expenses:—

1. Salaries and wages,	\$62,109 78	
2. Clothing,	5 25	
3. Subsistence,	77,714 26	
4. Ordinary repairs,	30,150 73	
5. Office, domestic and outdoor expenses,	17,983 09	
	<hr/>	\$187,963 11

Extraordinary expenses:—

1. New buildings, land, etc.,	\$7,584 04	
2. Permanent improvements to existing buildings,	1,402 40	
	<hr/>	8,986 44

Grand total, \$196,949 55

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients in sanatorium Dec. 1, 1909, . . .	184	162	346
Number admitted Nov. 30, 1909, to Dec. 1, 1910, . . .	396	366	762
Number discharged Nov. 30, 1909, to Dec. 1, 1910, . . .	402	356	758
Number of deaths (included in preceding item), . . .	9	3	12
Number remaining in sanatorium Nov. 30, 1910, . . .	178	172	350
Daily average number of patients,	179	161	340

TABLE 2. — *Monthly Admissions and Discharges, with Average Monthly Population.*

DATE.	ADMITTED.		DISCHARGED.		Daily Average.
	Males.	Females.	Males.	Females.	
1909.					
December,	27	23	25	28	342
1910.					
January,	34	31	37	31	342
February,	21	29	19	34	337
March,	35	30	41	23	342
April,	44	36	49	38	331
May,	37	33	33	33	334
June,	35	25	35	20	335
July,	37	16	33	14	342
August,	23	39	29	42	341
September,	37	43	35	37	338
October,	35	31	36	30	345
November,	31	30	30	26	348
Totals,	396	366	402	356	—

TABLE 3. — *Admissions and Discharges from the Beginning of the Sanatorium.*

	Number.	Per Cent.
Admitted,	8,118	—
Discharged,	7,768	—
Not considered,	1,499	—
Considered,	6,269	—
Arrested and apparently cured,	3,005	47.93
Improved,	2,644	42.17
Not improved,	620	9.89
Died,	71	—

TABLE 4. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Single,	220	165	385
Married,	165	172	337
Widowed,	11	28	39
Divorced,	—	1	1
Totals,	396	366	762

TABLE 5. — *Age of Patients admitted.*

	Males.	Females.	Totals.
Under 14 years,	—	—	—
14 to 20 years,	80	62	142
20 to 30 years,	145	160	305
30 to 40 years,	106	107	213
40 to 50 years,	47	35	82
Over 50 years,	18	2	20
Totals,	396	366	762

TABLE 6. — *Stage of Disease at Admission.*

	Males.	Females.	Totals.	Per Cent.
Incipient,	130	155	285	37.4
Moderately advanced,	184	172	356	46.7
Far advanced,	81	39	120	15.7
Nontubercular,	1	-	1	.1
Totals,	396	366	762	-

TABLE 7. — *Nativity of Patients admitted.*

PATIENT BORN IN —	Males.	Females.	Totals.	PATIENT BORN IN —	Males.	Females.	Totals.
United States,	294	259	553	Scotland,	4	1	5
Canada,	14	42	56	Prince Edward Island,	-	1	1
England,	10	5	15	Austria,	1	-	1
Ireland,	27	21	48	Poland,	2	1	3
Italy,	2	2	4	Finland,	1	1	2
Norway,	1	-	1	St. Helena,	-	1	1
Sweden,	10	10	20	Syria,	1	-	1
Germany,	6	4	10	Azores,	1	-	1
Russia,	21	10	31	Greece,	1	-	1
New Foundland,	-	5	5	Hungary,	-	1	1
Peru,	-	1	1				
Roumania,	-	1	1	Totals,	396	366	762

TABLE 7. — *Nativity of Patients admitted — Concluded.*

FATHER BORN IN —	Males.	Females.	Totals.	FATHER BORN IN —	Males.	Females.	Totals.
United States,	3	2	5	Roumania,	-	1	1
Canada,	37	66	103	Scotland,	7	3	10
England,	17	20	37	Prince Edward Island,	-	1	1
Ireland,	98	98	196	Austria,	1	2	3
Italy,	2	2	4	Poland,	2	2	4
Norway,	3	-	3	Finland,	2	2	4
Sweden,	19	15	34	Bohemia,	1	-	1
Germany,	10	10	20	Syria,	1	-	1
Russia,	28	14	42	Belgium,	1	-	1
Western Islands,	1	-	1	Azores,	2	1	3
Denmark,	-	1	1	Holland,	1	-	1
New Foundland,	3	6	9				
Peru,	1	-	1	Totals,	241	246	487
Portugal,	1	-	1				

TABLE 8. — *Residence of Patients admitted.*

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Boston,	125	110	235	Great Barrington,	1	-	1
Worcester,	23	17	40	Winthrop,	1	-	1
Fall River,	7	9	16	Salem,	2	1	3
Cambridge,	15	10	25	Northbridge,	1	-	1
Springfield,	6	7	13	Auburndale,	2	1	3
Lowell,	9	6	15	Holliston,	-	1	1
Lawrence,	6	10	16	Douglas,	1	-	1
Pittsfield,	6	3	9	Littleton,	1	-	1
New Bedford,	10	3	13	Malden,	4	4	8
Lynn,	16	17	33	Agawam,	-	1	1
Quincy,	2	4	6	Athol,	2	1	3
Gardner,	4	12	16	Dedham,	-	4	4
Brockton,	17	9	26	Fitchburg,	7	10	17
Haverhill,	8	2	10	Billerica,	-	1	1
Hyde Park,	5	2	7	Dalton,	2	4	6
Newburyport,	3	-	3	Shirley,	1	-	1
Somerville,	11	17	28	Holyoke,	3	2	5
Brookline,	2	2	4	Williamsburg,	1	-	1
Andover,	1	-	1	Watertown,	-	3	3
Chelsea,	5	4	9	Westminster,	-	1	1
Monson,	1	-	1	Framingham,	2	6	8
Rockland,	-	1	1	Ludlow,	-	1	1
Housatonic,	-	1	1	Gloucester,	2	5	7
Everett,	3	3	6	Greenfield,	-	1	1
Milford,	1	2	3	Hanover,	1	-	1
Natick,	1	-	1	Florence,	1	-	1
Westfield,	1	1	2	Weymouth,	2	-	2
Chartley,	1	-	1	Baldwinville,	1	-	1
Stockbridge,	2	-	2	Arlington,	1	1	2
Hingham,	-	1	1	Peabody,	1	-	1
Indian Orchard,	-	2	2	Everett,	1	2	3
Westwood,	-	1	1	Feeding Hills,	-	1	1
Attleborough,	12	6	18	Adams,	1	2	3
Charlton,	1	-	1	Williamstown,	1	-	1
Leominster,	2	3	5	Waltham,	2	5	7
West Sutton,	-	1	1	Franklin,	1	-	1

TABLE 8. — *Residence of Patients admitted* — Concluded.

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Maynard,	2	2	4	Kingston,	1	-	1
Bellingham,	1	-	1	Milton,	-	2	2
Middleborough,	2	1	3	Shelburne,	-	1	1
Bridgewater,	3	-	3	Hanson,	-	1	1
Woronoco,	1	-	1	Winchendon,	-	1	1
Concord,	1	1	2	Raynham,	1	-	1
Westford,	1	-	1	Charlemont,	-	1	1
Foxborough,	-	1	1	Woburn,	4	-	4
Danvers,	-	2	2	Clinton,	-	1	1
Amesbury,	1	-	1	Revere,	3	2	5
Hopedale,	1	1	2	Newton,	1	3	4
Bedford,	1	-	1	Wellesley,	-	1	1
Winchester,	-	1	1	Groveland,	-	1	1
Taunton,	2	-	2	Marblehead,	1	1	2
Brookfield,	-	1	1	West Upton,	-	1	1
Wakefield,	2	-	2	Palmer,	-	1	1
Webster,	-	2	2	Merrick,	-	1	1
Wrentham,	1	-	1	Belchertown,	1	-	1
Cliftondale,	1	-	1	Rutland,	2	2	4
Petersham,	1	-	1	Bryantville,	-	1	1
Melrose,	-	1	1	Belmont,	1	-	1
Milbury,	1	-	1	Medford,	3	3	6
Amherst,	-	1	1	Rockport,	-	2	2
Reading,	1	-	1	Needham,	1	1	2
Norwood,	2	1	3	Totals,	396	366	762

TABLE 9. — *Occupations.*

	Males.	Females.		Males.	Females.
Dentist,	1	-	Druggist,	3	-
Domestic,	-	14	Factory,	84	59
Draftsman,	2	-	Farmer,	5	-
Dressmaker,	-	2	Stoker, stationary,	2	-
Electrician,	5	-	Foreman,	4	-
Elevator boy,	2	-	Gas fitter,	1	-
Engineer, locomotive,	1	-	Housewife,	-	160
Engineer, stationary,	1	-	Housework,	-	21

TABLE 9. — *Occupations* — Concluded.

	Males.	Females.		Males.	Females.
Insurance, . . .	3	—	Hairdresser, . . .	—	1
Ironworker, . . .	8	—	Deaconess, . . .	—	1
Janitor, . . .	1	—	Civil engineer, . . .	1	—
Laborer, . . .	21	—	Lawyer, . . .	1	—
Laundry, . . .	—	3	Electrotyper, . . .	2	—
Leather worker, . . .	3	—	Rodman, . . .	2	—
Letter carrier, . . .	2	—	Fireman, . . .	1	—
Longshoreman, . . .	1	—	Missionary, . . .	1	—
Machinist, . . .	20	—	Florist, . . .	1	—
Mechanic, . . .	1	—	Bellboy, . . .	1	—
Milliner, . . .	—	3	Lady's maid, . . .	—	1
Motorman, . . .	1	—	Cutter, . . .	2	—
No work, . . .	1	4	Press feeder, . . .	—	1
Nursemaid, . . .	—	3	Demonstrator, . . .	—	2
Nurse, trained, . . .	1	8	Errand boy, . . .	1	—
Packer, . . .	4	1	Glassworker, . . .	1	—
Painter, . . .	6	—	Baker, . . .	1	—
Pedler, . . .	4	—	Decorator, . . .	1	—
Photographer, . . .	2	—	Lithographer, . . .	2	—
Policeman, . . .	1	—	Tobacco stripper, . . .	—	1
Polisher, . . .	2	—	Roofer, . . .	1	—
Porter, . . .	1	—	General work, . . .	2	1
Printer, . . .	7	—	Artist, . . .	1	—
Sailor, . . .	3	—	Attendant, . . .	1	1
Salespeople, . . .	12	6	Barber, . . .	3	—
Seamstress, . . .	—	2	Bartender, . . .	2	—
Shipper, . . .	1	—	Blacksmith, . . .	2	—
Stenographer, . . .	—	11	Bookbinder, . . .	1	—
Stonecutter, . . .	3	—	Bookkeeper, . . .	8	5
Student, . . .	32	16	Brakeman, . . .	1	—
Tailor, . . .	9	—	Butcher, . . .	2	—
Teacher, school, . . .	—	3	Cabinet maker, . . .	1	—
Teamster, . . .	13	—	Carpenter, . . .	7	—
Telephone operator, . . .	—	8	Chauffeur, . . .	1	—
Tinsmith, . . .	1	—	Cigar maker, . . .	1	—
Toolmaker, . . .	4	—	Clerk, . . .	46	17
Waiter, . . .	6	8	Conductor, street railway, . . .	5	—
Manicurist, . . .	—	2	Cook, . . .	1	1
Plumber, . . .	5	—	Coppersmith, . . .	1	—
Chemist, . . .	1	—	Totals, . . .	396	366

TABLE 11. — *Comparison of Percentages since the Adoption of National Association Classification.*

INCIPIENT CASES.	1905.	1906.	1907.	1908.	1909.	1910.
Apparently cured,	39.2	50.4	56.1	33.0	61.57	21.84
Arrested,	46.7	40.1	26.8	46.5	25.61	40.51
Improved,	12.0	8.9	16.3	17.3	10.83	28.61
Not improved,	2.0	.6	.7	3.0	1.97	9.03

TABLE 12. — *Deaths, Duration of Tuberculosis, Length of Stay in Sanatorium, and Cause of Death.*

DURATION.	Length of Residence.	Cause of Death.
2 years,	16 days,	Pulmonary tuberculosis.
5 years,	1 month, 10 days,	Pulmonary and laryngeal tuberculosis.
8 months,	1 month, 8 days,	Pulmonary tuberculosis.
4 months,	1 month, 7 days,	Miliary tuberculosis.
9 years,	8 months, 5 days,	Pulmonary tuberculosis.
6 months,	19 days,	Miliary tuberculosis.
4 months,	4 months, 14 days,	Pulmonary tuberculosis.
10 months,	4 months, 15 days,	Pulmonary tuberculosis.
6 months,	1 month, 21 days,	Tubercular meningitis.
2 months,	2 months,	Mitral regurgitation and pulmonary tuberculosis.
3 months,	2 months, 18 days,	Uremia.
1 year,	3 months, 26 days,	Intestinal perforation and peritonitis.

Climatological Data, Rutland State Sanatorium, Rutland, Altitude 1,160 feet, for the Official Year beginning Dec. 1, 1909, and ending Nov. 30, 1910.

DATE.	Mean Tempera- ture (Degrees).	Clear Days.	Partly Cloudy Days.	Cloudy Days.	Days with Rain or Snow.	Precipita- tion (Rain).	Precipita- tion (Snow).	Total Wind (Miles).	Wind Average Per Hour (Miles).	Mean Relative Humidity (Per Cent.).
1909.										
December,	23.6	20	6	5	6	3.90	15.60	6,835.8	9.19	77.4
1910.										
January,	25.4	14	5	12	15	5.53	17.90	8,946.5	12.02	79.5
February,	22.0	17	4	7	9	5.66	28.11	8,420.5	12.53	76.9
March,	37.7	25	4	2	7	.81	.20	7,944.7	10.68	60.5
April,	49.6	16	5	9	12	2.96	—	6,995.5	9.68	62.7
May,	54.2	10	8	13	7	2.05	—	6,676.2	8.97	65.9
June,	62.4	9	10	11	8	4.99	—	6,172.9	8.90	66.4
July,	71.6	17	6	8	5	1.60	—	6,283.5	8.44	61.9
August,	64.5	15	5	11	7	4.23	—	6,663.3	8.95	72.2
September,	59.6	18	4	8	8	3.52	—	5,404.0	6.12	75.9
October,	50.3	15	6	10	7	1.23	—	8,149.9	10.95	66.7
November,	34.5	6	9	15	9	3.86	14.30	6,810.6	9.45	76.5
Totals,	555.4	182	72	111	100	40.34	76.11	85,303.4	115.88	842.5
Averages,	46.2	15.1	6	9.2	8.3	3.36	6.34	7,108.6	9.65	70.2

FIFTH ANNUAL REPORT

OF THE

TRUSTEES OF MASSACHUSETTS HOSPITALS

FOR CONSUMPTIVES.

NOVEMBER 30, 1911.



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TRUSTEES.

ARTHUR T. CABOT, M.D., *Chairman.*

ARTHUR DRINKWATER.

SYLVIA B. KNOWLTON.

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WILLIAM D. MCFEE, M.D.

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JOHN B. HAWES, 2d, M.D., *Secretary.*

3 JOY STREET, BOSTON.

The Commonwealth of Massachusetts.

REPORT OF THE TRUSTEES OF MASSACHUSETTS HOSPITALS FOR CONSUMPTIVES.

*To His Excellency the Governor of the Commonwealth and to the
Honorable Council.*

In accordance with the act establishing this Board (chapter 474, Acts of 1907) we submit the following report: —

In June, 1910, the term of office of Mr. William C. Godfrey of Indian Orchard expired. Governor Foss appointed Mr. Daniel L. Prendergast of Brookline to fill the vacancy thus created. Aside from this there have been no changes in the personnel of the Board.

The four institutions under the control of this Board — the sanatoria at Rutland, North Reading, Lakeville and Westfield — have passed an active and successful year. At the three new sanatoria, although originally planned for only 150 patients, by means of tents, shacks, etc., the capacity has been so increased as to bring the daily average of patients to about 160. The daily average of patients at Rutland State Sanatorium has remained the same, 345.

The waiting list for these institutions, especially for men, is still a long one. There are now upon this list over 150 men and 75 women. By far the greater number of these are in the advanced stages of the disease. In the fall and winter months it is necessary for a man to wait at least two months after filing his application, and a woman at least one month, before his or her name is reached upon the list. This makes it particularly desirable to increase the number of beds for advanced cases at the sanatoria so as to shorten this list.

In the opinion of the Board it would not be wise to increase the capacity of the sanatorium at Rutland at the present time, but at the three other sanatoria the kitchen and the power plants could take care of more patients, so that a small outlay for a ward building at the North Reading, Lakeville and Westfield sanatoria would go far towards accommodating the patients on the waiting list who are urgently in need of sanatorium treatment. Their care would add but little to the burden of the State.

The Board would recommend, therefore, that suitable appropriation be made for an additional ward building at the North Reading, Lakeville and Westfield State sanatoria.

An interesting and encouraging feature of the work is the increased length of stay of patients at the three new sanatoria. In our last report we stated that the average length of stay of patients at these institutions was about three months. This has so increased that the average length of stay during the past year has been nearer one hundred and fifty days, or five months. The reasons for this are twofold: first, the sanatoria are being made more attractive; walks have been laid out, gardens planted, and fruit trees, shrubs, vines and flowers set out, while in the institutions themselves entertainments of various kinds have been given, all of which tend to make the life there more pleasant. In the second place, the public at large, as well as the medical profession, have become more and more alive to the value of sanatorium treatment, and have begun to appreciate the importance of isolating and caring for the advanced consumptive so as to prevent the further spread of the disease.

REGULATION OF WORK.

In our last report we called attention to the importance of suitable employment in the way of work of some kind as a part of the treatment for curable patients. That this is now a generally accepted idea is shown by the fact that work is prescribed as a therapeutic measure in every properly conducted tuberculosis sanatorium in this country and abroad. There was marked opposition on the part of patients and their friends in carrying out this plan at first. By patience, perseverance and tact on

the part of the superintendents, assistant physicians and nurses, this is being overcome, and at present at all of the State sanatoria every patient whose physical condition allows him to do so is expected to perform a measured amount of work selected according to his individual needs. The patients are beginning to recognize the importance of this part of their treatment and to realize that only in this way can they reach a degree of vigor which will keep them well after they return to their homes and their usual occupations.

EX-PATIENTS ON THE PAY ROLL.

In our last report we called attention to the number of ex-patients accepted as employees at the various sanatoria. The Board has continued this policy and has instructed the superintendents to be on the watch for capable and industrious patients in whom the disease has been cured or apparently arrested, and to place them upon the pay rolls of the institutions after their discharge as patients. The number of ex-patients thus employed has steadily increased during the past year, and is a gratifying evidence of the success of the sanatorium treatment. The sanatoria thus perform the double function of curing the patients and afterwards keeping them well. Our experience with these ex-patients as employees has been very satisfactory, and accords with that of sanatoria elsewhere in which this plan has been tried.

The Board, realizing that there are some patients referred by homœopathic physicians who might wish homœopathic treatment, have endeavored to procure a homœopathic physician for the staff of each of the State sanatoria. This is already accomplished at Rutland and North Reading, and as soon as suitable candidates can be found, and vacancies occur, we hope to have a homœopathic physician at each of these hospitals.

Acting under the subsidy bill (chapter 597, Acts of 1911) this Board has had examination made of municipal hospitals in Boston, Lawrence, Salem, Somerville and Westfield.

All of these hospitals, except that at Salem, were approved.

Stimulated by the above legislation the cities of Brockton, Cambridge, Fall River, Fitchburg, Haverhill, Holyoke, Lynn, Newburyport, Pittsfield, Springfield, Waltham and Worcester

have plans for hospitals under way and in some cases nearing completion.

New Bedford has an excellent private hospital where city cases are cared for, their board being paid by the city.

Other cities, which have found that it would be advantageous to provide for their city cases in private hospitals, have made inquiry as to whether they can properly apply for this subsidy for patients thus cared for at their expense.

It would seem wise and just to so amend the subsidy act as to make it cover such cases provided for by a city in a hospital that met the approval of this Board.

The examination of the sputum of patients for whom the subsidy is claimed is provided for in laboratories approved by this Board. When such laboratories are not available in the neighborhood of the hospital the sputum is sent to the laboratory of the State Board of Health.

The Auditor's office requires the certification by this Board of the financial condition of the patients for whom the subsidy is asked. An agent has been employed to investigate the circumstances of each case. His salary and expenses are paid out of the \$5,000 appropriated by the last Legislature for carrying out the purposes of this subsidy act.

As other hospitals are completed in different parts of the State, and the number of cases to be looked up increases, it will be necessary to employ one or more examiners for this purpose. In our estimate for the coming year we have asked for \$5,000 for this purpose, and this has been approved by the State Board of Charity.

Besides the subsidy bill an act (chapter 576, Acts of 1911) requiring boards of health of cities and towns to establish dispensaries for the examination and care of tuberculosis patients was enacted by the last Legislature.

Also an act (chapter 613, Acts of 1911) was passed requiring the boards of health of cities and towns to build a hospital, or to provide suitable quarters, for patients with contagious diseases, including tuberculosis.

Copies of these bills (which will be found in the Appendix to this report) have been sent to the boards of health of cities and towns of over 10,000 inhabitants.

EDUCATIONAL WORK.

During the past year the educational work of the Board has steadily increased. As in the past, bulletins have been sent out every two weeks to nearly 200 newspapers in the State. Many letters touching on every phase of the tuberculosis question have been written to physicians, patients and their friends and anti-tuberculosis workers, not only in Massachusetts but all over the country. The office of the Board has become an information bureau to which patients, physicians and others are constantly coming to interview the secretary of the Board in regard to the sanatoria and other questions connected with the work. Literature in the way of reports, reprints, instructive pamphlets, pay-envelope cards, etc., are kept on hand for distribution. Members of the Board, the four superintendents and the secretary, have given lectures to large numbers of people on the general subject of tuberculosis, and the four superintendents have given many informal talks on this subject to their patients. The Journal of the State sanatoria, a monthly paper published at the Rutland State Sanatorium, in addition to giving items of news from the four sanatoria, contains numerous articles of interest and value not only to patients but to their friends and to the public at large. This paper is distributed to the patients, anti-tuberculosis associations, physicians and to many others who have asked that their names be put upon the mailing list.

The school tuberculosis exhibits mentioned in our last report have been used in the public schools of various cities and towns throughout the State. Below, in tabulated form, will be found the exact location of each exhibit:—

School Tuberculosis Exhibits.

	Loaned.	Bought.
Boston, city of	5	5
Boston Association for Relief and Control of Tuberculosis,	—	1
Braintree,	1	—
Brookline Anti-Tuberculosis Association,	—	1
Canton,	—	1
Chelsea,	—	1
Chicopee,	1	—

	Loaned.	Bought.
Clinton,	-	1
Fitchburg,	-	1
Gardner,	1	-
Great Barrington,	1	-
Haverhill,	-	1
Holyoke,	1	-
Lawrence,	1	-
Lowell,	1	-
Lynn,	1	-
Middleborough,	1	-
Northampton,	1	-
Pittsfield,	-	1
Springfield,	1	-
Westfield,	1	-
Worcester,	1	-

In co-operation with the National Tuberculosis Association and the National Bill Posting Association, large posters in regard to tuberculosis, its prevention and cure, were placed in prominent places in every large city in this State for a period of several weeks during the past year.

In many other ways a knowledge of tuberculosis and its prevention, and of proper hygiene in general, has been spread abroad.

The above-described work of our Board makes it plain that it is impossible for a set of busy men to visit the sanatoria in the manner prescribed by section 11, chapter 474, Acts of 1907.

It is important, therefore, that the trustees should have the assistance in the above work of a competent medical man, who should give his whole time to it. Moreover, the work of the sanatoria is closely connected with the anti-tuberculosis work in many cities and towns, and it is of great importance that the closest co-operation among all agencies working against tuberculosis in the State should be fostered and directed.

It is most proper that this direction and fostering care should be exerted by the Trustees of Hospitals for Consumptives, who have charge of the sanatoria which must be the backbone of any system of State control.

After long study and consideration of the work now in our hands, and with the realization of the need of a uniform plan and system patiently and intelligently adhered to, we feel that it is most imperative that our Board shall have an executive

secretary, who to a medical training unites a capacity for administration. Such a secretary would carry on the traditions of the work of a Board the personnel of which is always liable to change. He would have time and opportunity to master the details of our work, would keep the trustees constantly informed, and could pursue such investigations as the Board might direct in regard to the management of other sanatoria from which we might learn facts important to the management of our own. Such a man, we believe, would effect economies which would many times offset his salary. More important than this, however, he would enable us to carry on the work against tuberculosis in such a manner as to get the best results from all the measures the State is putting in operation.

From the above consideration it seems clear that this Board should have at its disposal a medical health officer of high class, who should have a salary of at least \$5,000. We respectfully ask permission to seek out and engage a man fitted for these duties.

DISBURSEMENTS.

Appropriation,	\$5,100 00
Salary of secretary,	\$2,000 00
Salary of stenographer,	1,000 00
Rent of offices,	800 00
Press clippings,	60 00
Expenses of trustees,	389 65
Telephone,	67 42
Electric lighting,	12 00
Extra clerical assistance,	153 75
Stationery, office supplies, printing, etc.,	614 92
	<hr/>
	\$5,097 74

The estimates for the maintenance of this office for the coming year, all of which have been approved by the State Board of Charity, are as follows: —

Salary of secretary,	\$2,000 00
Salary of stenographer and clerk,	1,000 00
Extra clerical service,	500 00
Travel and necessary expenses of trustees, including printing report, office expenses, etc.,	2,670 00
Carrying out purposes of chapter 597, Acts of 1911,	5,000 00
	<hr/>
	\$11,170 00

NORTH READING STATE SANATORIUM.

The North Reading State Sanatorium, which was opened Sept. 22, 1909, has now been in operation over two years. Extra beds have been provided so that the average number of patients is about 160, and it is planned to increase this number to 175 during the next year. This is particularly necessary as the waiting list for this institution is larger than that for any other and is constantly increasing.

At this institution cement walks have been laid out, an extensive orchard of fruit trees has been planted, an excellent vegetable garden has been developed, the trees trimmed, and in many ways the grounds have been made much more attractive and pleasant.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries and wages,	\$30,336 00
Food,	29,590 00
Clothing and material,	218 00
Furnishings,	2,000 00
Heat, light and power,	4,500 00
Repairs and improvements,	5,800 00
Farm, stable and grounds,	3,000 00
Miscellaneous,	6,066 00
	<hr/>
	\$81,510 00

LAKEVILLE STATE SANATORIUM.

The Lakeville State Sanatorium has been kept full during the past year with an average number of patients of about 160. It is planned to increase this number to 175 during the next year. The grounds have been greatly improved and made attractive with numerous fruit trees, shrubs and flowers.

At this institution, owing to the difficulty in obtaining a proper milk supply from local producers, the advisability of establishing a dairy farm in connection with this institution has been brought up. This matter is now under consideration by the Board.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows: —

Salaries, wages and labor,	\$33,400 00	
Food,	30,500 00	
Clothing and material,	500 00	
Furnishings,	3,200 00	
Heat, light and power,	5,000 00	
Repairs and improvements,	3,500 00	
Farm, stable and grounds,	3,500 00	
Miscellaneous,	7,000 00	
	<hr/>	\$86,600 00

For special appropriations: —

Shack for 20 patients,	\$1,800 00
Duplicate pump and motor,	600 00

Land and equipment for dairy: —

Land, about 50 acres (with
buildings now insured for
\$2,600), \$5,000 00

Thirty cows and dairy ap-
paratus, 3,000 00

Remodeling barn, water sup-
ply, etc., 2,000 00

10,000 00

\$12,400 00

WESTFIELD STATE SANATORIUM.

The Westfield State Sanatorium has been kept full during the past year. At times the waiting list of patients, women especially, from the western part of the State, has not been large enough to fill the vacancies. Patients have therefore been sent there from the east.

The water supply for this institution is still in danger of pollution from an adjoining farm. As stated in earlier reports, an appropriation for the purchase of this farm was asked while there was yet power of eminent domain, in order to secure it at a reasonable figure. The period during which this farm could have been thus secured has expired, but the danger of pollution from this source, according to analyses from the State Board of Health, remains the same. The Board, therefore, has requested a special appropriation to purchase this property.

The estimates for the coming year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$32,000 00	
Food,	32,000 00	
Clothing and material,	500 00	
Furnishings,	2,500 00	
Heat, light and power,	5,000 00	
Repairs and improvements,	3,500 00	
Farm, stable and grounds,	3,500 00	
Miscellaneous,	8,000 00	
	<hr/>	\$87,000 00

For special appropriations:—

Purchase of adjacent farm, known as the Pignatare property, consisting of 40 acres of land and buildings,	\$3,500 00	
Construction of a cow stable,	2,000 00	
Purchase of cows,	1,500 00	
	<hr/>	\$7,000 00

RUTLAND STATE SANATORIUM.

The Rutland State Sanatorium has been kept full during the past year. This institution has been under the control of this Board since the opening of the last of the three new State sanatoria, in February, 1910. Reference has been made earlier in this report to the efforts of the Board to reserve it for incipient and favorable cases.

The estimates for the following year, all of which have been approved by the State Board of Charity, are as follows:—

Salaries, wages and labor,	\$63,000 00	
Food,	72,000 00	
Clothing and material,	100 00	
Furnishings,	6,900 00	
Heat, light and power,	13,000 00	
Repairs and improvements,	4,000 00	
Farm, stable and grounds,	8,000 00	
Miscellaneous,	14,000 00	
	<hr/>	\$181,000 00

For special appropriations:—

Horse barn,	\$8,950 00
New hydrant near nurses' home, and fire extinguisher,	400 00
Rebuilding road through sanatorium grounds,	1,400 00
Addition to carpenter shop,	700 00
Wood and iron working machinery, . .	500 00
	<hr/>
	\$11,950 00

Respectfully submitted,

ARTHUR T. CABOT.

ARTHUR DRINKWATER.

GEORGE A. DUNN.

ALBERT C. GETCHELL.

SYLVIA B. KNOWLTON.

WILLIAM D. McFEE.

DANIEL L. PRENDERGAST.

APPENDIX.

ACTS RELATING TO TUBERCULOSIS HOSPITALS.

ACTS OF 1911, CHAPTER 576.

AN ACT TO PROVIDE FOR THE MAINTENANCE OF TUBERCULOSIS DISPENSARIES IN CITIES AND TOWNS OF TEN THOUSAND INHABITANTS OR OVER.

Every city and every town containing a population of ten thousand or more, as determined by the latest United States census, shall establish and maintain within its limits a dispensary for the discovery, treatment, and supervision of needy persons resident within its limits and afflicted with tuberculosis, unless there already exists in such city or town a dispensary which is satisfactory to the state board of health. The said dispensaries shall be subject to the regulations of the boards of health of the cities or towns in which they are respectively situated. A city or town subject to the provisions of this act which upon the request of the state board of health, refuses or neglects to comply with the provisions hereof, shall forfeit not more than five hundred dollars for every such refusal or neglect. [*Approved June 22, 1911.*]

ACTS OF 1911, CHAPTER 597.

AN ACT TO ENCOURAGE AND PROMOTE THE BUILDING AND USE OF TUBERCULOSIS HOSPITALS IN CITIES AND TOWNS.

SECTION 1. Every city or town which establishes and maintains a tuberculosis hospital shall be entitled to receive from the commonwealth a subsidy of five dollars per week for each patient who is unable to pay for his support, or whose kindred bound by law to maintain him are unable to pay for the same, but the city or town shall not become entitled to this subsidy unless, upon examination authorized by the trustees of hospitals for consumptives, the sputum of such patients be found to contain bacilli of tuberculosis, and unless the hospital be subject to the inspection of, and be approved by, said trustees.

SECTION 2. Said trustees of hospitals for consumptives shall certify in the case of each hospital approved by them as provided in the preceding section the number of patients for whom the city or town is entitled to the subsidy, and upon such certification the subsidy shall be paid from the treasury of the commonwealth in the same manner in which other claims against the commonwealth are paid.

SECTION 3. This act shall take effect upon its passage.

ACTS OF 1911, CHAPTER 613.

AN ACT RELATIVE TO THE MAINTENANCE OF ISOLATION HOSPITALS BY
CITIES AND TOWNS.

SECTION 1. Chapter seventy-five of the Revised Laws is hereby amended by striking out section thirty-five and inserting in place thereof the following:— *Section 35.* Each city and town shall establish and constantly maintain within its limits one or more isolation hospitals for the reception of persons having diseases dangerous to the public health as defined by the state board of health, including a tuberculosis hospital or tuberculosis wards. Plans for the construction of such hospitals shall be approved by the state board of health, and said hospitals shall be inspected by the state board of health or by its accredited agent, at least twice in every year. But if, in the opinion of the state board of health, two or more adjoining towns or a city and contiguous towns can advantageously establish and maintain such hospitals in common, the authorities of said towns or of such cities and contiguous towns may enter into such agreements as may be necessary for the establishment and maintenance of the same. Any city or town which upon the request of the state board of health refuses or neglects to comply with the provisions of this section shall forfeit not less than five hundred dollars for every such refusal or neglect.

SECTION 2. This act shall take effect upon its passage. [*Approved June 30, 1911.*]

NORTH READING STATE SANATORIUM.

RESIDENT OFFICERS.

CARL C. McCORISON, M.D., . . . *Superintendent and Physician.*
NEWELL B. BURNS, M.D., *Assistant Superintendent and Physician.*
HARRY S. NEWHART, M.D., . . . *Assistant Physician.*

REPORT OF THE SUPERINTENDENT.

*To the Trustees of Hospitals for Consumptives, 3 Joy Street, Boston,
Mass.*

LADIES AND GENTLEMEN: — I have the honor of presenting to you the report of the North Reading State Sanatorium for the year ending Nov. 30, 1911.

The records show that during the year 460 patients have been treated and that 302 have been admitted. The lowest daily census was 153, and the highest 161. The daily average number of patients was 158.23, which is 10.23 more than that of the preceding year.

There have been admitted, during the year, 14 incipient, 65 moderately advanced, 221 advanced cases and 2 not tuberculous. Thirty-one patients were removed against advice, and of this number 17 had remained in the sanatorium one week or less. There has been a daily average of 71 bed cases, approximately 45 per cent. of the daily population, — an increase of 5 per cent. over that of last year. The greater number of these bed cases have been in the far advanced stages of the disease, although a few have required bed treatment only a short time, due to the frequent setbacks incident to the disease.

Of the 302 cases admitted, 243 were inside workers, and 223 were admitted from cities and towns having a population of 25,000 or more.

The average duration of residence in the sanatorium was one hundred and sixty-seven days, as opposed to sixty-five for the preceding year; the longest residence of any one person was seven hundred and thirty-four days, and the shortest, one day.

Of the patients discharged during the year, 155 have gained in weight, the total gain being 1,614 pounds and the average gain 10.4 pounds; 8 patients have remained stationary, 42 have lost, 31 were not considered (duration in the sanatorium being less than one week) and 64 patients have died. Fifty-one patients have been discharged arrested, 91 were improved, 54

were progressive, 64 have died, 38 were not considered (duration of stay being less than one month) and 2 were not tuberculous. The average age was 31.01 years. One hundred and fifty-two were foreign born and 90 were American born, but of foreign parentage.

One hundred and thirty-one have been supported from private funds, 177 cases by cities and towns, 59 cases entirely by the State, and 26 private cases have later become either town or State charges. There were remaining, November 30, 22 private cases, 61 city or town cases, 35 State cases and 42 unknown cases.

The total cost for maintenance for the year ending Nov. 30, 1911, was \$78,999.93; deducting \$601.52, collected from miscellaneous sources, leaves a net amount expended for maintenance of \$78,398.41. The average per capita cost per week is \$9.50. There has been collected from private patients \$6,625.92, and from cities and towns, \$15,028.70. Further details will be found in succeeding pages of this report.

Our patients are slowly beginning to realize that a certain amount of well-regulated exercise, in the form of light occupation, is a most valuable part of the treatment, and the fact that a few of the patients have been discharged and taken on as regular employees has acted as a stimulus to the others. At the present time all of the mending, hemming of towels and bed linen is being done by the female patients, and they are taking an active part in the housekeeping of various parts of the institution, including waiting on table in the patients' dining room. A great deal of work is being done by our male patients, such as painting, light carpentering, care of poultry, ward work, waiting on table and picking up about the grounds.

Of course many of our patients are unfit to perform the lightest of duties, consequently the amount of work accomplished depends wholly upon the physical condition of the whole at any given time.

We have recently taken up the work of following up cases which have been discharged from the sanatorium one year or more. Thus far the work has been rather discouraging. Out of 235 letters sent out to ex-patients, only 91 have been heard from, and of these 43 have been reported as dead.

IMPROVEMENTS.

Additional concrete walks have been built and cement floors laid in the pavilions' basements. Repairs and additions to the barn have been completed. The new piggery and hennery have been built. The hospital wards, lavatories, serving rooms, dining rooms and kitchen, and all rooms on the office floor of the administration building have been painted, also trimmings on all the buildings except the farmhouse. A concrete platform, with underground garbage receivers, and a catch basin draining directly into the sewer, has been placed at the side of the kitchen entrance. The new engine, generator and incinerator, has been installed. One hundred apple trees and 4,000 strawberry plants have been set out. Electric lights have been placed along the road leading from the administration building to the farmhouse, and lights installed in farmhouse and barn. Water has been carried to farmhouse, stable and piggery. A combination sterilizer and washing machine has been installed in the laundry. A new pump with a capacity of 125 gallons per minute has been installed, and addition made to pump house to accommodate same. A storm vestibule has been built over the east entrance of the patients' dining room.

A short driveway has been built on the north side of the buildings on the men's side, and the road leading from the administration building to the farmhouse rebuilt. A small camp for the use of ex-patient employees is under construction, and will probably be completed by the middle of the winter. The work on the sewerage purification is nearly completed. A motor-driven ice-cream freezer has been purchased and is about to be installed. Gutters have also been purchased for the various buildings. A large cesspool has been placed in the rear of the female hospital to take care of the excess surface water which accumulates there during the late winter and early spring.

STAFF.

Dr. E. B. Emerson, superintendent and resident physician, resigned Oct. 1, 1911, to accept a position at the Bridgewater State Farm as medical director. Dr. A. P. Janes resigned

February 17 to accept a position at the Lakeville State Sanatorium as first assistant. Dr. N. B. Burns was appointed second assistant, succeeding Dr. Janes. Dr. C. C. McCorison was appointed superintendent, succeeding Dr. Emerson, Oct. 1, Dr. N. B. Burns being appointed first assistant, and Dr. H. S. Newhart, of the Westborough State Hospital, appointed second assistant, to succeed Dr. Burns. Miss Susan R. Haynes has been appointed treasurer, the appointment taking effect Nov. 20, 1911.

FARM AND GARDENS.

There have been almost 4 acres under cultivation the past year, and the productiveness has been somewhat greater than previous years. Three additional acres have been broken for future cultivation.

RECOMMENDATIONS.

The sum of \$82,110 will be required for the maintenance of the sanatorium in the ensuing year.

ACKNOWLEDGMENTS.

I wish to express our thanks to the Rev. Father Walsh and the Rev. F. A. Jenkins, who have officiated at the religious services and responded to the calls of the sick in the hospital wards. I wish to express my thanks for the many gifts of books, magazines, periodicals, etc., presented to the sanatorium. I especially wish to thank Miss Delight W. Hall of Andover, and the Church of the Epiphany of Winchester, for their many gifts of books and periodicals; Mrs. E. W. Emerson of Concord for her contributions of clothing; Mr. Bailey of Reading for flowers and ice cream and the King's Daughters of Andover for a Christmas box for the male patients.

I wish to thank the officers, employees, and others who have helped to lighten my responsibilities during my two months of administration. I wish to express to the trustees my deepest appreciation for their kindness and helpfulness which they have extended to me.

Respectfully submitted,

CARL C. MCCORISON,
Superintendent.

REPORT OF THE TREASURER.

To the Trustees North Reading State Sanatorium.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1911: —

CASH ACCOUNT.

Balance Dec 1, 1910,	\$352 03
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Receipts.

Institution Receipts.

Board of inmates: —

Private,	\$6,625 92
Cities and towns,	15,028 70

\$21,654 62

Sales: —

Food,	\$4 50
Clothing and materials,	31 65
Furnishings,	32
Repairs and improvements,	73 80
Miscellaneous,	491 25

601 52

Miscellaneous receipts: —

Interest on bank balances,	101 17
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22,357 31

Receipts from Treasury of Commonwealth.

Maintenance appropriations: —

Balance of 1910,	\$5,245 81
Advance money (amount on hand November, 30, \$7,000, less returned, \$2,711.81),	4,288 19
Approved schedules of 1911,	\$69,671 71
Less returned,	2 07

69,669 64
79,203 64

Special appropriations,	7,053 70
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Total,	\$108,966 68
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Payments.

To treasury of Commonwealth, institution receipts,	\$22,357 31
Maintenance appropriations: —	
Balance November schedule, 1910,	\$5,597 84
Eleven months' schedules, 1911,	69,669 64
November advances,	4,288 19
	<hr/>
	79,555 67
Special appropriations: —	
Approved schedules,	7,053 70
	<hr/>
Total,	\$108,966 68

MAINTENANCE.

Appropriation,	\$79,000 00
Expenses (as analyzed below),	78,999 93
	<hr/>
Balance reverting to treasury of Commonwealth,	\$0 07

Analysis of Expenses.

Salaries, wages and labor: —	
General administration,	\$12,431 02
Medical service,	4,492 97
Ward service (male),	1,351 82
Ward service (female),	5,169 09
Repairs and improvements,	1,675 57
Farm, stable and grounds,	3,829 67
	<hr/>
	\$28,950 14
Food: —	
Butter,	\$2,102 07
Butterine,	83 47
Beans,	55 04
Bread and crackers,	54 58
Cereals, rice, meal, etc.,	127 03
Cheese,	157 47
Eggs,	3,434 15
Flour,	505 40
Fish,	660 77
Fruit (dried and fresh),	1,651 12
Meats,	9,177 10
Milk,	5,275 48
Molasses and syrup,	26 69
Sugar,	849 89
Tea, coffee, broma and cocoa,	348 26
Vegetables,	1,852 20
Sundries,	741 20
	<hr/>
	27,101 92
Clothing and materials: —	
Boots, shoes and rubbers,	\$16 57
Clothing,	301 83
Dry goods for clothing and small wares,	64 00
Hats and caps,	2 70
	<hr/>
	385 10
Amount carried forward,	\$56,437 16

<i>Amount brought forward,</i>		\$56,437 16
Furnishings: —		
Beds, bedding, table linen, etc.,	\$1,203 15	
Brushes, brooms,	223 97	
Carpets, rugs, etc.,	171 30	
Crockery, glassware, cutlery, etc.,	537 70	
Furniture and upholstery,	617 44	
Kitchen furnishings,	693 47	
Wooden ware, buckets, pails, etc.,	251 99	
Sundries,	132 21	
		<hr/>
		3,831 23
Heat, light and power: —		
Coal,	\$3,067 40	
Freight on coal,	579 88	
Oil,	147 95	
Sundries,	46 10	
		<hr/>
		3,841 33
Repairs and improvements: —		
Brick,	\$69 30	
Cement, lime and plaster,	174 83	
Doors, sashes, etc.,	41 25	
Electrical work and supplies,	765 88	
Hardware,	316 53	
Lumber,	852 92	
Machinery, etc.,	132 00	
Paints, oil, glass, etc.,	550 30	
Plumbing, steam fitting and supplies,	1,573 16	
Sundries,	1,035 59	
		<hr/>
		5,511 76
Farm, stable and grounds: —		
Blacksmith and supplies,	\$92 31	
Carriages, wagons, etc., and repairs,	275 70	
Fertilizers, vines, seeds, etc.,	856 92	
Hay, grain, etc.,	852 07	
Harnesses and repairs,	38 45	
Other live stock,	126 00	
Tools, farm machines, etc.,	296 96	
Sundries,	642 23	
		<hr/>
		3,180 64
Miscellaneous: —		
Books, periodicals, etc.,	\$67 33	
Chapel services and entertainments,	778 93	
Freight, expressage and transportation,	681 12	
Funeral expenses,	66 00	
Ice,	7 65	
Medicines and hospital supplies,	1,716 98	
Medical attendance, nurses, etc. (extra),	15 00	
Postage,	161 20	
Printing and printing supplies,	375 25	
Soap and laundry supplies,	687 46	
Stationery and office supplies,	294 06	
		<hr/>
<i>Amounts carried forward,</i>	\$4,850 98	\$72,802 12

<i>Amounts brought forward,</i>	\$4,850 98	\$72,802 12
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Miscellaneous — *Con.*

Travel and expenses (officials),	231 89	
Telephone and telegraph,	189 18	
Tobacco,	.	.	.	.	5 45	
Cuspidor supplies,	668 95	
Sundries,	251 36	
					<hr/>	6,197 81

Total expenses for maintenance,	\$78,999 93
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SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1910,	\$7,006 36
Appropriations for fiscal year,	3,537 75

Total,	.	.	.	.	.	\$10,544 11
Expended during the year (see statement annexed),					\$7,053 70	
Reverting to treasury of Commonwealth,	08	
					<hr/>	7,053 78

Balance Nov. 30, 1911,	\$3,490 33
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RESOURCES AND LIABILITIES.

Resources.

November cash vouchers (paid from advance money),	\$4,288 19	
Due from treasury of Commonwealth account		
November, 1911, schedule,	5,042 10	
	<hr/>	\$9,330 29

Liabilities.

Schedule of November bills,	\$9,330 29
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PER CAPITA.

During the year the average number of inmates has been 158.23.

Total cost for maintenance, \$78,999.93.

Equal to a weekly per capita cost of \$9.575.

Receipts from sales, \$601.52.

Equal to a weekly per capita of \$0.072.

All other institution receipts, \$21,755.79.

Equal to a weekly per capita of \$2.636.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Addition to barn,	Acts 1910, chap. 114	\$2,500 00	\$2,500 00	\$2,500 00	-
Addition to barn, additional allowance,	Sundry small items,	37 75	37 75	37 75	-
Additional furnishings and equipment,	Acts 1910, chap. 114	2,500 00	324 86	2,500 00	-
Hennery, piggery, etc.,	Acts 1910, chap. 114	3,300 00	1,681 42	3,299 92	\$0 08 ¹
Engine and generator, etc.,	Acts 1910, chap. 114	1,500 00	1,500 00	1,500 00	-
Land, spur tracks, etc.,	Acts 1910, chap. 114	1,000 00	52 40	52 40	947 60
Sewerage purification,	Acts 1911, chap. 99	3,500 00	957 27	957 27	2,542 73
		\$14,337 75	\$7,053 70	\$10,847 34	\$3,490 41

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

SUSAN R. HAYNES,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

Statement of Present Value of All Personal Property as per Inventory taken Nov. 30, 1911, at North Reading State Sanatorium.

ITEMS.	Present Value.
Food,	\$3,380 09
Clothing and clothing materials,	449 28
Furnishings,	18,610 23
Heat, light and power,	14,525 90
Repairs and improvements,	6,427 09
Farm, stable and grounds,	5,086 60
Miscellaneous,	3,500 57
Grand total,	\$51,979 76
Total valuation of real estate: —	
Land,	\$6,765 50
Buildings,	73,175 00
Total,	\$79,940 50

PRODUCTS OF FARM AND GARDENS.

5 bushels shell beans.	1 bushel rhubarb.
36 bushels string beans.	1 peck radishes.
35 bushels beets.	4 bushels spinach.
880 dozen ears sweet corn.	11 bushels summer squash.
1½ bushels cantaloupes.	50 bushels tomatoes.
60 bushels cucumbers.	59 bushels turnips.
968 heads lettuce.	62 bushels carrots.
132 watermelons.	1,000 heads cabbage.
13 bushels peas.	4½ tons squash.
114 bushels potatoes.	20 bushels parsnips.

Hogs slaughtered from stock of the farm, 2,895 pounds.

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of inmates present at beginning of fiscal year, .	82	76	158
Number received during the year,	153	149	302
Number discharged or died during the year,	149	151	300
Number at end of the fiscal year,	84	76	160
Daily average attendance (<i>i.e.</i> , number of inmates actually present) during the year.	83.85	74.38	158.23
Average number of officers and employees during the year,	33	30	63

Expenditures.

Current expenses:—

1. Salaries and wages,	\$28,950 14	
2. Clothing,	385 10	
3. Subsistence,	30,943 25	
4. Ordinary repairs,	5,511 76	
5. Office, domestic and outdoor ex- penses,	13,209 68	
Total,		\$78,999 93

Extraordinary expenses:—

1. Additional furnishings and equip- ment,	\$324 86	
2. Addition to barn,	2,537 75	
3. Hennery, piggery, etc.,	1,681 42	
4. Engine and generator, etc., . .	1,500 00	
5. Land, spur tracks, etc., . . .	52 40	
6. Sewerage purification,	967 27	
Total,		10,847 34

Grand total,	\$89,847 27
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Notes on current expenses:—

1. Salaries and wages should include salaries of trustees or directors, if any.
2. Clothing includes shoes, and also materials for clothing and shoes if they are manufactured in the institution.
3. Ordinary repairs include all of those which simply maintain the buildings in condition, without adding to them. Any repairs which are of the nature of additions should be classed with "permanent improvements."
4. This item includes everything not otherwise provided for, *e.g.*, furniture, bedding, laundry supplies, medicines, engineer's supplies, postage, freight, library, etc.

Executive head (superintendent and resident physician): CARL C. MCCORISON.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Patients in sanatorium Dec. 1, 1910,	82	76	158
Number of patients admitted Dec. 1, 1910, to Nov. 30, 1911, inclusive.	153	149	302
Number discharged Dec. 1, 1910, to Nov. 30, 1911, inclusive,	149	151	300
Number of deaths (included in preceding item),	31	33	64
Number remaining in sanatorium Nov. 30, 1911,	84	76	160
Daily average number of patients,	83.85	74.38	158.23

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	68	63	131
Single,	81	76	157
Widowed,	4	10	14
Totals,	153	149	302

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
1 to 14 years,	—	4	4
14 to 20 years,	12	32	44
20 to 30 years,	61	53	114
30 to 40 years,	37	33	70
40 to 50 years,	23	21	44
Over 50 years,	20	6	26
Totals,	153	149	302

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
Massachusetts,	63	22	15	57	14	15	120	36	30
Other New England States, . . .	7	7	12	3	5	4	10	12	16
Other States,	12	7	8	8	5	6	20	12	14
Total native,	82	36	35	68	24	25	150	60	60
Other countries: —									
Armenia,	1	1	1	—	—	—	1	1	1
Canada,	12	23	25	35	39	37	47	62	62
Denmark,	—	1	—	—	1	—	—	2	—
England,	4	6	7	2	5	7	6	11	14
Finland,	1	1	1	1	1	1	2	2	2
France,	—	1	—	1	1	1	1	2	1
Germany,	1	1	1	—	2	1	1	3	2
Ireland,	20	43	44	20	43	42	40	86	86
Italy,	2	4	4	2	5	4	4	9	8
Norway,	—	—	—	—	—	1	—	—	1
Poland,	—	—	—	3	2	3	3	2	3
Portugal,	1	1	—	—	1	1	1	2	1
Russia,	22	25	25	14	15	18	36	40	43
Scotland,	2	2	1	1	5	2	3	7	3
Sweden,	3	3	3	1	3	2	4	6	5
Syria,	1	1	1	—	—	—	1	1	1
Switzerland,	1	1	1	—	—	—	1	1	1
Turkey,	—	—	—	1	1	1	1	1	1
Total foreign,	71	114	114	81	124	121	152	238	235
Unknown,	—	3	4	—	1	3	—	4	7
Totals,	153	153	153	149	149	149	302	302	302

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Andover,	1	Newburyport,	3
Arlington,	3	Newton,	7
Ayer,	1	North Attleborough,	1
Beachmont,	1	North Reading,	1
Beverly,	2	North Woburn,	1
Boston,	63	Plymouth,	1
Brockton,	2	Reading,	2
Brookline,	2	Readville,	1
Cambridge,	8	Revere,	1
Chelmsford,	1	Salem,	7
Chelsea,	14	Somerville,	8
Cliftondale,	2	South Framingham,	1
Everett,	9	Stoneham,	3
Fall River,	1	Swampscott,	2
Gloucester,	9	Taunton,	1
Graniteville,	2	Tewksbury,	3
Greenwood,	1	Tyngsborough,	1
Haverhill,	10	Wakefield,	3
Hopkinton,	1	Waltham,	5
Ipswich,	4	Watertown,	2
Lanesville,	1	Waverley,	1
Lawrence,	6	Wellesley,	2
Lincoln,	1	Westford,	1
Lowell,	22	Whitman,	1
Lynn,	35	Winchester,	4
Malden,	21	Winthrop,	1
Medford,	8	Woburn,	3
Melrose,	2	Worcester,	1
Milton,	1	Total,	302

TABLE 6.—*Occupation of Cases admitted.*

	Males.	Females.		Males.	Females.
Brewery manager, . . .	1	-	Librarian, . . .	-	1
Baker,	1	-	Musician,	1	-
Bookkeeper,	1	4	Milliner,	-	1
Box maker,	-	2	Mill hand,	2	2
Butler,	1	-	Machinist,	7	-
Barber,	1	-	Meter reader,	1	-
Blacksmith,	1	-	Master mariner,	1	-
Broker,	1	-	Milkman,	1	-
Cashier,	-	1	Mason,	1	-
Carpet maker,	-	1	Motorman,	3	-
Cap maker,	-	1	Nurse,	-	2
Clerk,	8	3	Photographer,	1	-
Cook,	1	1	Piano maker,	1	-
Carriage maker,	1	-	Plasterer,	2	-
Cigar maker,	1	-	Plumber,	2	-
Coppersmith,	2	-	Painter,	4	-
Carpenter,	3	-	Pedler,	1	-
Coachman,	1	-	Printer,	1	-
Chauffeur,	1	-	Rubber shoe maker,	2	1
Domestic,	-	27	Sailor,	1	-
Dressmaker,	-	1	Shoe worker,	21	3
Electrical factory opera- tive,	-	3	Student,	7	8
Electrician,	3	-	Saleslady,	-	2
Expressman,	1	-	Stenographer,	2	1
Engraver,	1	-	Seamstress,	-	1
Embroidery worker,	1	-	Stone cutter,	1	-
Factory operator,	-	11	Stove mounter,	1	-
Fisherman,	2	-	Silver polisher,	2	-
Fireman,	3	-	Street car conductor,	2	-
Farmer,	3	-	Shipper,	2	-
Fish cutter,	1	-	Teamster,	4	-
Freight handler,	1	-	Tailor,	4	1
Granite cutter,	1	-	Telephone operator,	1	4
Housewife,	-	54	Towerman,	1	-
Home,	6	6	Underwriter,	1	-
Iron worker,	3	-	Watchmaker,	1	1
Insurance agent,	1	-	Waiter,	3	6
Janitor,	1	-	Weaver,	2	-
Laborer,	13	-	Totals,	153	149

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	5	9	14
Moderately advanced,	29	36	65
Advanced,	118	103	221
Non-tubercular,	1	1	2
Totals,	153	149	302

TABLE 8. — *Condition on Discharge.*

	Males.	Females.	Totals.
Arrested,	26	25	51
Improved,	49	42	91
Progressive,	19	35	54
Died,	31	33	64
Not considered (duration of stay less than one month),	23	15	38
Non-tubercular,	1	1	2
Totals,	149	151	300

TABLE 9. — *Deaths.*

DURATION OF DISEASE.	Males.	Females.	Totals.	LENGTH OF RESIDENCE IN SANATORIUM.		
				Males.	Females.	Totals.
Under 1 month,	—	—	—	5	6	11
1 to 2 months,	—	—	—	6	5	11
2 to 3 months,	—	—	—	3	5	8
3 to 4 months,	—	—	—	2	3	5
4 to 5 months,	1	—	1	—	5	5
5 to 6 months,	2	1	3	3	2	5
6 to 7 months,	—	—	—	1	—	1
7 to 8 months,	—	—	—	—	2	2
8 to 9 months,	—	—	—	1	—	1
10 to 12 months,	2	—	2	3	3	6
12 to 18 months,	7	2	9	4	2	6
18 to 24 months,	7	16	23	3	—	3
Over 2 years,	12	14	26	—	—	—
Totals,	31	33	64	31	33	64

TABLE 10. — *Cause of Death.*

	Males.	Females.	Totals.
Phthisis,	31	33	64

LAKEVILLE STATE SANATORIUM.

RESIDENT OFFICERS.SUMNER COOLIDGE, M.D., . . . *Superintendent.*ARTHUR P. JANES, M.D., . . . *Physician.*FRANK L. S. REYNOLDS, M.D., . . . *Physician.*

ABBIE A. BLISS, *Supervisor of Nurses.*ELLA M. KELLEY, *Matron.*LESTON P. GIDDINGS, *Steward.*FRANK H. GLOVER, *Chief Engineer.*JONAS HIRST, *Farmer.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

LADIES AND GENTLEMEN: — I have the honor to submit herewith the report of the Lakeville State Sanatorium for the year ending Nov. 30, 1911.

During the year the institution has cared for 513 patients, of whom 356 were admitted after Nov. 30, 1910, the latter number being classified as follows: incipient, 32, approximately 9 per cent.; moderately advanced, 105, or 29 per cent.; advanced, 218, or 60.7 per cent.; probably non-tuberculous, 1.

RESIDENCE.

Of these 356 patients, 134, or 37.6 per cent., were admitted from Boston; 19, or 5.3 per cent., from New Bedford; 15, or 4.2 per cent., from Brockton; 26, or 7.3 per cent., from Fall River; 18, or 5 per cent., from Quincy, and 144, or about 40 per cent., from 67 other towns and cities.

CLASSIFICATION.

The following comparative classification, before and after admission, of 500 cases discharged during the year, or remaining in the sanatorium November 30, is interesting: —

	Before Admission.	After Admission.
Incipient,	107	43
Moderately advanced,	291	185
Advanced,	85	269
Not classified,	17	3
	<hr/>	<hr/>
Total,	500	500

Of 513 cases treated, 80, or 16 per cent., have been paid for by private funds; 252, or 49 per cent., by cities and towns; 107, or 21 per cent., entirely by the State; and 33, or 6 per

cent., were admitted as private cases and later became city or State charges. There remain 74 whose status has not yet been determined.

The daily average number of bed cases has been 59.51, or 37.4 per cent. of the total daily average number of patients.

CLASSIFICATION ON DISCHARGE.

It will be noticed that none were discharged "apparently cured," all who formerly would have been thus classified having been placed in the "arrested" class.

LENGTH OF STAY.

The average length of stay of patients remaining in the sanatorium Nov. 30, 1910, was one hundred and forty-one days on that date, representing the average stay of the more earnest and contented of those admitted during our first year.

This period of stay has been maintained approximately throughout the year, the average for 1911 being 140.56 days. The longest stay was twenty-one months, nineteen days; the shortest, one day.

WEIGHTS OF PATIENTS DISCHARGED.

Disregarding 53 men and 38 women who remained less than one week or who died, whose weight charts were necessarily incomplete, there remain 114 men whose average gain was 9.97 pounds, and 88 women whose average gain was 12.9 pounds, making the total average gain for 202 patients, 10.89 pounds. There were 5 men and 4 women whose weights were the same on discharge as on admission, and 48 patients who lost weight.

The greatest gain of a man was 40 pounds, and of a woman, 44 pounds.

DAILY AVERAGE POPULATION AND COST OF MAINTENANCE.

By the use of a large tent and a small shack in addition to the two ward buildings it was possible to maintain a daily average of 158.81 patients for the whole year notwithstanding which there has always been a waiting list of applicants.

Deducting \$298.19, the amount of miscellaneous receipts,

from the total cost of maintenance, \$80,510.05, leaves \$80,211.86 as the net cost of maintenance, which on a basis of 158.81 daily population is a per capita cost of \$9.69 per week.

ADDITIONS AND IMPROVEMENTS.

During the year all the work for which special appropriations were made in 1910 was completed with the exception of a few minor details, and the same is true of the special appropriations of 1911, with the exception of that for a recreation and employment building. It has been thought best to defer the construction of this building until it could be more definitely decided what class of cases would predominate at this sanatorium, and whether or not the segregation of the sexes in separate sanatoria would be advisable.

A new poultry house has been built, making a total capacity of 800 hens; the sewerage system has been extended, and with the help of a new special appropriation of 3,000, which was granted just before the Legislature adjourned last summer, the water supply has been augmented by an open well 30 feet deep and 20 feet in diameter, which it is thought will afford a permanent supply ample for all needs of the institution.

TREATMENT.

Routine physical examination of each patient is made on admission and every three months, and before leaving the sanatorium on leave of absence or discharge. Several examinations have been made by request of outside physicians and of the superintendent of a local shoe factory.

Urinalysis is always done on admission and repeated as indicated. Six cases of nephritis have been discovered during the year.

Sputum examinations are made on admission and when indicated, to confirm diagnosis or to ascertain the degree of improvement.

Occasional requests for sputum examinations from local physicians have always been cheerfully complied with.

Seven hundred and fifteen sputum examinations were made during the year.

The use of tuberculin as a therapeutic agent was begun in a small way last March, and, on the whole, results have been encouraging. Eleven cases have been thus treated. We are planning now a larger series of cases for this year.

In addition to the usual rest treatment in the open air, an attempt has been made to institute a system of graduated exercise, copying, so far as local conditions would allow, the plan of the Brompton Sanatorium at Frimley, England. The patients are divided into two classes, according to their physical condition, as follows: —

Class 1. *White badge*, no exercise.

Class 2. (a) *Green badge*, exercise not to exceed one-half hour walking, make own bed, pick up papers and light rubbish, etc.

(b) *Yellow badge*, exercise not to exceed one hour, make own bed, wipe or wash dishes, clean silver, wipe woodwork, clean lavatories, hand weeding, etc.

(c) *Blue badge*, exercise not to exceed two hours, make own bed, set out plants, trim bushes and bean poles, pick small stones, trim grass edges, rake, paint, sweep, etc.

(d) *Red badge*, exercise to be increased gradually from two hours to six hours, make own bed, hoe, pull weeds, mow lawns, trim trees, pick stones, clear land, etc.

This classification is revised monthly with reassignment of work to give variety, and otherwise modified when variations in the condition of patients make it advisable.

The classes are differentiated by badges of distinctive colors, by which one may know at a glance to which class each patient belongs.

The most difficult part of the scheme is to find occupations for the several classes with sufficient regularity and in sufficient quantity to cover an extended period of time, although it is almost as difficult to convince some patients that work, which in their experience has served only the purpose of feeding and clothing them, can bring them any good now that they are being comfortably fed and clothed by the bounty of others.

To meet these two difficulties a great deal of time was spent by the superintendent in the personal supervision of outdoor

work for patients in the spring and early summer, and so long as the superintendent continued this personal supervision considerable work of practical value was accomplished.

Besides the ward work, making beds, cleaning, dusting, sweeping, serving, dish washing, etc., which is decidedly distasteful to male patients, there were 30 to 40 per cent. of the men and a less proportion of the women engaged in outside work. The edging of the walks and drives, setting some 2,000 bedding plants, trimming and pointing 2,000 bean poles, training 1,000 tomato plants to wires throughout the season, raking the dressing from the lawns, cutting seed potatoes for 3 acres, shelling peas and beans and trimming dandelions throughout the season for the kitchen, and the planting of tulips and other bulbs were all done by patients, and they gave good help in clearing and burning brush and stumps, picking stones, setting nursery stock, mowing lawns, weeding lawns and flower beds, rolling lawns, gathering flower seeds and harvesting rye. Many of the patients had never done such work before, but almost all showed an interest in it, while being taught, and gained a greater confidence in the institution by doing a little real work for it. No attempt was made to work patients until they reacted, and in no case was there perceptible injury to the patient.

The most diligent and efficient worker was a man who spent the first twenty weeks in the sanatorium in bed, an advanced case with high temperature, but who later gained some 40 pounds in spite of daily work through the hot weather, eventually leaving the sanatorium an arrested case and returning to his work as a plumber.

The first essential to such a system of exercising patients is personal supervision, and as no employee suitable for such supervisory work was available, the extent to which the system was carried was limited by the available time and energy of the superintendent.

It is hoped that more can be accomplished this year.

IMPROVEMENTS DESIRED.

In view of the fact that the waiting list of applicants has never been entirely exhausted, and that patients often have to wait eight or ten weeks after their applications are filed, it

would seem imperative that our present capacity be increased. To this end it is recommended that a shack for 20 patients be erected, to cost \$1,800.

Another urgent need is that of a duplicate pump and motor for our water supply. The single unit upon which we are depending at present has been working continuously more than two years and is in need of repairs. We have been dangerously near a water famine by a small accident to the pump, showing the necessity of installing a duplicate. This will cost \$600.

The institution is finding great difficulty in procuring an adequate milk supply, and the time has come to consider the home production of milk. At present we require 43 cans per day. We send four miles for it and wash the cans, so that it nets us over 50 cents per can of 8 quarts, or \$7.847.50 per year. If this arrangement is to be continued it will be necessary to buy another horse.

During September and October an unusual shortage in the local supply made it necessary to buy in Boston at a net cost of 8 cents per quart.

At that time it was found that in this part of the State hardly enough milk is produced for the retail trade, that the large dealers have no distributing stations in this part of the State, and that no provision is made by the railroads for the transportation of milk.

The actual cost of producing our milk supply should not be over 5 cents per quart, and under favorable conditions it may be produced for less.

It is recommended that about 70 acres of land, with buildings which can be readily applied to our use, now on the market, be purchased and equipped with stock and apparatus as soon as practicable. The total initial cost of land, stock and equipment need not be over \$10,000, which is but little more than one year's expenditure for milk under the present arrangements.

The estimated cost of maintenance for such a dairy as is proposed would be approximately —

Interest on \$10,000 at 4 per cent.,	\$400
Dairyman, \$50 per month,	600
Three men at \$25 per month,	900
Feed for 35 cows at \$3 per week,	5,460
	<hr/>
	\$7,360
Credit, by rental of two-tenement house,	250
	<hr/>
Net cost of maintenance,	\$7,110

The land in question, bordering the Nemasket River, is the best in this vicinity, and is now under cultivation.

MEDICAL SERVICE.

Dr. Solon W. Cornish, first assistant, resigned in February to take up private practice, and was succeeded by Arthur P. Janes, M.D., Tufts, 1905, formerly second assistant at the North Reading State Sanatorium. The position of second assistant was filled by Dr. John J. Stack up to Jan. 2, 1911; by Dr. Clarence B. Kenney from Jan. 4, 1911, to July 1, 1911; and by Dr. Otis F. Simonds from July 9, 1911, to Aug. 30, 1911, when he resigned to accept a position with the health department of the Canal Zone. The present incumbent, Frank L. S. Reynolds, M.D., Tufts, 1908, comes to us after two years' good experience in another State institution.

The institution is most fortunate in securing the services of Miss Abbie A. Bliss as supervisor of nurses. Miss Bliss's experience in executive work and as a teacher of nurses has already produced a marked improvement in the *esprit de corps* of the nursing staff.

Appreciating the many expressions of the confidence of your Board, and commending the faithful co-operation of my subordinates, this report is respectfully submitted.

SUMNER COOLIDGE,

Superintendent.

Nov. 30, 1911.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1911: —

CASH ACCOUNT.

Balance Dec. 1, 1910,	\$2,047 92
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Receipts.

Institution Receipts.

Board of inmates: —

Private,	\$3,889 77
Cities and towns,	8,849 33
								\$12,739 10

Salaries, wages and labor: —

Labor of employees,	3 60
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Sales: —

Food,	\$3 00
Clothing and materials,	111 68
Furnishings,	10 84
Miscellaneous,	68 43
								193 95

Farm, stable and grounds: —

Pigs and hogs,	.	.	.	.	.	.	.	\$9 00
Vegetables,	.	.	.	.	.	.	.	7 50
								16 50

Miscellaneous receipts: —

Interest on bank balances,	.	.	.	.	.	.	.	84 14
								13,037 29

Receipts from Treasury of Commonwealth.

Maintenance appropriations: —

Balance of 1910,	.	.	.	.	.	.	.	\$4,502 30
Advance money (amount on hand November 30),	.	.	.	.	.	.	.	5,000 00
Approved schedules of 1911,	.	.	.	.	.	.	.	\$71,552 75
Less returned,	6 32
								71,546 43

Special appropriations,	81,048 73
								13,682 99

Total,	\$109,816 93
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Payments.

To treasury of Commonwealth, institution receipts,		\$13,037 29
Maintenance appropriations: —		
Balance November schedule, 1910,	\$6,550 22	
Eleven months' schedules, 1911,	71,546 43	
November advances,	2,153 41	
	<hr/>	80,250 06
Special appropriations: —		
Approved schedules,		13,682 99
Balance, Nov. 30, 1911: —		
In bank,	\$2,749 03	
In office,	97 56	
	<hr/>	2,846 59
Total,		<hr/> \$109,816 93

MAINTENANCE.

Appropriation,	\$80,520 00
Expenses (as analyzed below),	80,510 05
	<hr/>
Balance reverting to treasury of Commonwealth,	\$9 95

Analysis of Expenses.

Salaries, wages and labor: —		
General administration,	\$15,291 30	
Medical service,	4,550 87	
Ward service (male),	1,273 22	
Ward service (female),	3,657 67	
Repairs and improvements,	2,289 28	
Farm, stable and grounds,	5,218 01	
	<hr/>	\$32,280 35
Food: —		
Butter,	\$1,735 19	
Butterine,	163 29	
Beans,	89 93	
Bread and crackers,	128 06	
Cereals, rice, meal, etc.,	217 77	
Cheese,	54 91	
Eggs,	2,191 10	
Flour,	776 46	
Fish,	663 49	
Fruit (dried and fresh),	634 25	
Meats,	6,739 17	
Milk,	6,389 05	
Molasses and syrup,	23 85	
Sugar,	671 31	
Tea, coffee, broma and cocoa,	416 83	
Vegetables,	1,006 32	
Sundries,	441 05	
	<hr/>	22,342 03
Clothing and materials: —		
Boots, shoes and rubbers,	\$87 10	
Clothing,	413 37	
	<hr/>	
Amounts carried forward,	\$500 47	\$54,622 38

<i>Amounts brought forward,</i>	\$500 47	\$54,622 38
Clothing and materials — <i>Con.</i>		
Dry goods for clothing and small wares,	1 50	
Furnishing goods,	5 98	
Hats and caps,	3 43	
Sundries,	10 50	
		521 88
Furnishings: —		
Beds, bedding, table linen, etc.,	\$515 87	
Brushes, brooms,	129 83	
Carpets, rugs, etc.,	552 94	
Crockery, glassware, cutlery, etc.,	352 69	
Furniture and upholstery,	209 23	
Kitchen furnishings,	622 31	
Wooden ware, buckets, pails, etc.,	43 83	
Sundries,	387 87	
		2,814 57
Heat, light and power: —		
Coal,	\$3,596 97	
Freight on coal,	97 53	
Oil,	69 32	
Sundries,	189 62	
		3,953 44
Repairs and improvements: —		
Brick,	\$41 77	
Cement, lime and plaster,	357 32	
Doors, sashes, etc.,	170 95	
Electrical work and supplies,	902 01	
Hardware,	514 67	
Lumber,	1,066 81	
Machinery, etc.,	220 65	
Paints, oil, glass, etc.,	345 22	
Plumbing, steam fitting and supplies,	1,848 33	
Roofing and materials,	291 88	
Sundries,	573 19	
		6,332 80
Farm, stable and grounds: —		
Blacksmith and supplies,	\$118 98	
Carriages, wagons, etc., and repairs,	309 57	
Fertilizers, vines, seeds, etc.,	754 41	
Hay, grain, etc.,	2,157 26	
Harnesses and repairs,	66 85	
Other live stock,	491 81	
Rent,	300 00	
Tools, farm machines, etc.,	420 82	
Sundries,	183 94	
		4,803 64
Miscellaneous: —		
Books, periodicals, etc.,	\$183 62	
Chapel services and entertainments,	306 05	
Freight, expressage and transportation,	918 15	
Funeral expenses,	50 00	
Hose, etc.,	88 57	
<i>Amounts carried forward,</i>	\$1,546 39	\$73,048 71

<i>Amounts brought forward,</i>	\$1,546 39	\$73,048 71
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Miscellaneous — *Con.*

Ice,	592 53	
Medicines and hospital supplies,	2,098 72	
Postage,	160 00	
Printing and printing supplies,	284 41	
Sputum fillers,	502 68	
Soap and laundry supplies,	364 95	
Stationery and office supplies,	678 73	
Travel and expenses (officials),	307 06	
Telephone and telegraph,	281 73	
Tobacco,	9 46	
Paper napkins,	151 36	
Sundries,	483 32	
	<hr/>	7,461 34

Total expenses for maintenance,	\$80,510 05
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SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1910,	\$9,682 82
Appropriations for fiscal year,	6,300 00
	<hr/>
Total,	\$15,982 82
Expended during the year (see statement annexed),	\$13,682 99
Reverting to treasury of Commonwealth,	3 20
	<hr/>
	13,686 19
	<hr/>
Balance Nov. 30, 1911,	\$2,296 63

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$2,846 59
November cash vouchers (paid from advance money),	2,153 41
Due from treasury of Commonwealth account	
November, 1911, schedule,	3,963 62
	<hr/>
	\$8,963 62

Liabilities.

Schedule of November bills,	\$3,963 62
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PER CAPITA.

During the year the average number of inmates has been 15,881.

Total cost for maintenance, \$80,510.05.

Equal to a weekly per capita cost of \$9.722.

Receipts from sales, \$214.05.

Equal to a weekly per capita of \$0.025.

All other institution receipts, \$12,823.24.

Equal to a weekly per capita of \$1.548.

Special Appropriations.

ОБЪЕКТ.	Act or Resolved.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
New barn,	Acts 1910, chap. 118	\$10,000 00	\$8,779 82	\$9,974 13	\$25 87
Refrigerating plant,	Acts 1910, chap. 118	2,500 00	543 30	2,402 38	97 62
Poultry house, etc.,	Acts 1910, chap. 118	2,350 00	132 75	2,348 82	1 18 ¹
Generator plant,	Acts 1910, chap. 118	1,500 00	100 26	1,497 98	2 02 ¹
Employment building,	Res. 1911, chap. 98	1,800 00	—	—	1,800 00
Poultry house,	Res. 1911, chap. 98	500 00	417 17	417 17	82 83
Sewage,	Res. 1911, chap. 98	500 00	437 68	437 68	62 32
Additional water supply,	Res. 1911, chap. 136	} 3,500 00	3,272 01	3,272 01	227 99
	Res. 1911, chap. 98				
		\$22,650 00	\$13,682 99	\$20,350 17	\$2,296 63

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

SUMNER COOLIDGE,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

Real estate:—

Land, number of acres, 75, valuation, . . .	\$4,125 00
Buildings and water plant, valuation, 1910,	\$93,875 00
Additions and improvements, 1911, . . .	28,220 00
	<hr/>
	122,095 00
	<hr/>
Total real estate valuation,	\$126,220 00

Personal estate:—

Live stock on farm,	3,205 00
Produce of farm on hand,	293 00
Carriages and agricultural implements,	1,703 50
Machinery and mechanical fixtures,	2,070 00
Beds and bedding in inmates' department,	4,037 28
Other furniture in inmates' department,	1,679 37
Personal property of State in superintendent's de- partment,	7,467 98
Ready-made clothing,	156 93
Provisions and groceries,	887 97
Drugs and medicines,	548 27
Fuel,	1,006 50
Other supplies undistributed,	1,817 75
	<hr/>
Total personal estate valuation,	\$24,873 55
 Total valuation,	 \$151,093 55

SPECIAL REPORT.

The following report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number of patients present at beginning of fiscal year, .	80	77	157
Number received during the year,	211	145	356
Number discharged or died during the year,	206	144	350
Number at end of fiscal year,	85	78	163
Daily average attendance (<i>i.e.</i> , number of inmates actually present) during the year.	81.32	77.49	158.81
Average number of officers and employees during the year,	44	22	66

Expenditures.

Current expenses:—

1. Salaries and wages,	\$32,280 35	
2. Clothing,	521 88	
3. Subsistence,	22,342 03	
4. Ordinary repairs and improvements,	6,332 80	
5. Office, domestic, and outdoor expenses,	19,032 99	
		\$80,510 05

Extraordinary expenses:—

1. New buildings, land, etc.,	\$9,196 99	
2. Permanent improvements to existing buildings and grounds,	4,486 00	
Total,		13,682 99
Grand total,		\$94,193 04

Summary of Current Expenses.

Total expenditures,	\$94,193 04
Deducting extraordinary expenses,	13,682 99
	<hr/>
	\$80,510 05
Deducting amount of sales,	298 19
	<hr/>
	\$80,211 86

Dividing this amount by the daily average number of patients, 158.81, gives a cost for the year of \$505.08, equivalent to an average weekly net cost of \$9.69.

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted, Dec. 1, 1901, to Nov. 30, 1911, inclusive.	211	145	356
Number of patients discharged, Dec. 1, 1910, to Nov. 30, 1911, inclusive.	206	144	350
Number of deaths (included in preceding item), . . .	36	26	62
Number remaining in sanatorium, Nov. 30, 1911, . . .	85	78	163
Daily average number of patients,	81.32	77.49	158.81
Daily average number of bed patients, Dec. 1, 1910, to Nov. 30, 1911.	28.23	31.28	59.51

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	74	59	133
Single,	123	78	201
Widowed,	11	6	17
Divorced,	3	2	5
Separated,	—	—	—
	211	145	356

TABLE 3. — *Age of Patients admitted.*

	Males.	Females.	Totals.
1 to 14 years,	2	2	4
14 to 20 years,	27	21	48
20 to 30 years,	83	68	151
30 to 40 years,	56	35	91
40 to 50 years,	30	15	45
Over 50 years,	13	4	17
	211	145	356

TABLE 4. — *Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
United States: —									
Massachusetts,	90	24	22	51	20	21	141	44	43
Other New England States,	11	9	8	7	8	5	18	17	13
Other States,	8	6	6	9	5	8	17	11	14
Total native,	109	39	36	67	33	34	176	72	70
Other countries: —									
Austria,	4	3	3	2	2	3	6	5	6
Azores,	1	1	1	1	2	2	2	3	3
Belgium,	1	1	1	—	—	—	1	1	1
Bulgaria,	1	1	1	—	—	—	1	1	1
Canada,	19	31	32	18	18	21	37	49	53
Denmark,	2	2	2	—	—	—	2	2	2
England,	9	11	10	7	9	7	16	20	17
France,	—	—	—	—	—	1	—	—	1
Germany,	2	5	3	1	5	4	3	10	7
Greece,	1	1	1	—	—	—	1	1	1
Holland,	—	—	—	—	1	—	—	1	—
Ireland,	18	55	61	18	35	34	36	90	95
Italy,	4	10	10	5	5	5	9	15	15
Japan,	1	1	1	—	—	—	1	1	1
Portugal,	1	1	1	—	1	1	1	2	2
Russia,	22	24	24	19	22	21	41	46	45
Scotland,	2	2	—	1	3	3	3	5	3
Sweden,	8	11	10	4	5	5	12	16	15
Syria,	1	1	1	—	—	—	1	1	1
Turkey,	2	2	2	—	—	—	2	2	2
Wales,	—	—	—	—	1	—	—	1	—
West Indies,	1	1	1	—	—	—	1	1	1
Total foreign,	100	164	165	76	109	107	176	273	272
Unknown,	2	8	10	2	3	4	4	11	14
Totals,	211	211	211	145	145	145	356	356	356

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Abington,	5	Millis,	1
Amesbury,	1	Milton,	1
Ashland,	2	Milford,	3
Attleborough,	10	Needham,	1
Braintree,	3	Newton,	3
Bridgewater,	2	New Bedford,	19
Boston,	134	Norfolk Downs,	1
Brockton,	15	North Easton,	2
Brookline,	3	North Reading,	1
Cambridge,	5	Norwood,	2
Canton,	5	Onset,	1
Chatham,	2	Pittsfield,	1
Chelsea,	2	Plymouth,	7
Dedham,	1	Quincy,	18
Dennisport,	1	Randolph,	2
Everett,	1	Raynham,	1
Fairhaven,	1	Revere,	1
Fall River,	26	Rockland,	4
Fiskdale,	1	Somerville,	3
Foxborough,	3	Southbridge,	1
Hampton, N. H.,	1	South Framingham,	2
Hanover,	1	Springfield,	1
Hanson,	1	Stoughton,	1
Hatfield,	1	Taunton,	11
Hingham,	1	Upton,	1
Hopedale,	1	Uxbridge,	1
Hyde Park,	4	Waltham,	4
Lowell,	1	Wareham,	2
Malden,	2	Watertown,	3
Mansfield,	4	Waverley,	1
Marlborough,	1	Webster,	1
Marstons Mills,	1	Westwood,	1
Mashpee,	1	Whitman,	2
Mattapoisett,	1	Woburn,	1
Maynard,	2	Worcester,	1
Medway,	1		
Middleborough,	3		
			356

TABLE 6. — *Occupations.*

	Males.	Females.		Males.	Females.
Baker,	1	—	Musician,	1	1
Barber,	1	—	No occupation,	3	—
Bartender,	3	—	Nurse,	3	4
Bookbinder,	1	—	Painter,	1	—
Brakeman,	2	—	Pattern maker,	1	—
Bricklayer,	2	—	Pedler,	2	—
Candy maker,	1	3	Photographer,	1	—
Car cleaner,	1	—	Picture frame maker,	1	—
Carpenter,	3	—	Plumber,	2	—
Cigar maker,	2	1	Printer,	3	—
Clerk,	13	5	Reporter,	1	—
Clothing designer,	1	—	Roofer,	1	—
Coachman,	1	—	Rope maker,	1	—
Cook,	—	4	Sailor,	1	—
Cooper,	1	—	Salesman,	4	1
Domestic,	—	24	School,	7	6
Dressmaker,	—	6	Shipper,	1	—
Engraver,	2	—	Ship rigger,	1	—
Errand girl,	—	1	Shirtwaist factory,	—	2
Factory foreman,	1	—	Seamstress,	—	4
Factory operatives,	3	5	Shoe maker,	2	—
Farmer,	3	—	Shoe operative,	30	3
Fireman,	1	—	Silver buffer,	1	—
Fish cutter,	1	—	Stationary engineer,	1	—
Furrier,	1	—	Street railroad inspector,	1	—
Gas fitter,	1	—	Stenographer,	2	4
Gardener,	2	—	Stone mason,	2	—
Glass blower,	2	—	Stone cutter,	8	—
Hatter,	4	—	Street car conductor,	1	—
Housewife,	—	50	Tailor,	3	1
Iron molders,	2	—	Teamster,	10	—
Jewelry factory,	5	3	Telephone operator,	—	1
Laborer,	20	—	Telegraph operator,	3	—
Machinist,	11	—	Textile mill operative,	10	12
Meat cutter,	2	—	Toy maker,	1	—
Messenger boy,	1	—	Tradeswoman,	—	1
Milliner,	—	1	Waiter,	3	1
Missionary,	—	1		211	145
Motorman,	3	—			

TABLE 7.—*Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	21	11	32
Moderately advanced,	70	35	105
Advanced,	119	99	218
Non-tuberculous,	1	—	1
Totals,	211	145	356

TABLE 8.—*Condition on Discharge.*

	Males.	Females.	Totals.	Per Cent.
Arrested,	11	13	24	6.86
Improved,	98	53	151	43.14
Progressive,	29	29	58	16.57
Died,	36	26	62	17.71
Not considered (duration of stay less than one month).	32	23	55	15.72
Totals,	206	144	350	100.00

TABLE 9.—*Classification of Discharges.*

	Males.	Females.	Totals.
Total number discharged,	206	144	350
Number died,	36	26	62
	170	118	288
Not considered,	32	23	55
Total number considered,	138	95	233

TABLE 10. — *Deaths.*

	DURATION OF DISEASE.			LENGTH OF RESIDENCE IN SANATORIUM.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	-	-	-	7	4	11
1 to 2 months,	-	-	-	6	5	11
2 to 3 months,	-	-	-	5	1	6
3 to 4 months,	-	-	-	6	2	8
4 to 5 months,	-	-	-	2	5	7
5 to 6 months,	-	-	-	3	2	5
6 to 7 months,	-	1	1	-	1	1
7 to 8 months,	-	-	-	2	2	4
8 to 9 months,	-	-	-	1	-	1
9 to 10 months,	-	1	1	-	-	-
10 to 11 months,	-	-	-	2	-	2
11 to 12 months,	-	-	-	1	1	2
1 to 2 years,	22	15	37	1	3	4
2 to 3 years,	6	6	12	-	-	-
3 to 4 years,	4	3	7	-	-	-
4 to 5 years,	1	-	1	-	-	-
10 to 11 years,	1	-	1	-	-	-
Unknown,	2	-	2	-	-	-
Totals,	36	26	62	36	26	62

TABLE 11. — *Cause of Death.*

	Males.	Females.	Totals.
Phthisis pulmonalis,	36	26	62

WESTFIELD STATE SANATORIUM.

RESIDENT OFFICERS.

HENRY D. CHADWICK, M.D., . . . *Superintendent.*

HARRY S. WAGNER, M.D., . . . *Physician.*

ROY MORGAN, M.D., . . . *Physician.*

CAROLINE A. BAILEY, . . . *Supervisor of Nurses.*

HERBERT W. SMITH, . . . *Steward.*

WALTER PROUTY, . . . *Chief Engineer.*

FRANK P. BUXTON, . . . *Farmer.*

REPORT OF THE SUPERINTENDENT.

To the Trustees of Hospitals for Consumptives.

LADIES AND GENTLEMEN:—I have the honor of presenting to you the second annual report of the Westfield State Sanatorium for the year ending Nov. 30, 1911.

One hundred and fifty-seven patients admitted during the previous year remained in the sanatorium on Dec. 1, 1910; 323 patients have since been admitted, making a total of 480 patients receiving treatment during the year. Three hundred and fifteen have been discharged, leaving 165 patients in the sanatorium Dec. 1, 1911.

The daily average number of patients has been 156.8. The daily average number of bed patients has been 26 men and 29 women, — a total of 55. This is but one more than the average last year, although there has been an increase of 72 in the average daily population.

The average length of stay of discharged patients has been one hundred and forty-five days. Fifty-one stayed less than one month, 92 one to three months, 73 from three to six months, 41 from six to nine months, 33 from nine months to one year; 25 stayed more than one year.

The condition of patients on admission and on discharge will be found in the appended tables of statistics.

Of the 323 patients admitted, 142 paid their board, 102 were supported by cities and towns, 35 were State charges and the status of 44 has not yet been determined.

The gross weekly per capita cost has been \$9.78. The per capita cost less sales, \$9.59, less total receipts, \$6.88.

The average age of all patients admitted was twenty-nine years; 12 were under fourteen years and 49 were between fourteen and twenty years of age.

The presence of many children in the wards with adults.

unless they are ill in bed, is not to be recommended on account of their noise and activity, which interferes with the quiet and rest which older people require. Of more importance still is the fact that there are always some degenerate individuals in the wards whose moral influence is bound to have an evil effect on the character of the children. I hope that enough children will soon be admitted to fill one of our pavilions and so keep them isolated from the adults. A teacher can then be employed and a hospital school conducted. This would interest the children and make them more contented, although as a class they are inclined to be less homesick than are older patients. Their education would not then be completely interrupted as is now the case when a child is excluded from the public schools on account of illness.

LABORATORY WORK.

The number of sputum examinations made has been 966; the number of blood examinations, 22; vaccines prepared, 17.

Eighteen patients raised no sputum for examination.

The sputum of 203 patients was positive on the first examination. It required 2 examinations to find tubercle bacilli in the sputum of 50 patients, 3 examinations to find bacilli in the sputum of 18 patients, 4 examinations to find tubercle bacilli in the sputum of 8 patients and 5 examinations to find bacilli in the sputum of 3 patients.

Eleven patients who had positive sputum when admitted lost their bacilli during residence so that their sputum was negative when discharged. Antiformin was used in testing 60 specimens of sputum, 7 of which proved positive, although bacilli could not be found by other methods. The sputum of 13 patients, which was negative by all tests, proved to be negative to guinea-pig inoculation.

The Von Pirquet tuberculin test was made on 69 patients.

Thirty-four patients have been treated with bouillon filtrate tuberculin over a period of from two to eight months.

Six patients have been admitted and discharged during the year on whom, after careful observation and tuberculin tests, we failed to find sufficient evidence of tuberculosis. Three had

chronic asthma; 1, abscess of lung; 1, malignant disease of the lung; 1, valvular disease of the heart; 1, convalescent from pneumonia; 1, abdominal tumor.

IMPROVEMENTS.

The \$1,000 appropriated for enlarging the locker rooms and diet kitchens has been expended. The additional space in the locker rooms provides for 20 more lockers. This will allow us to increase the number of beds from 158 to 178. During the three winter months it will not be advisable to care for more than 170, but the remainder of the year a full number can be provided for by leaving some beds on the porches.

The improvements in the diet kitchens are greatly appreciated; the increased space and equipment facilitates the preparation of the trays for the bed patients and enables us to serve the food in a more appetizing way.

Considerable grading has been done about the buildings. Walks have been laid out and trees and shrubbery planted.

IMPROVEMENTS NEEDED.

Water Supply.

I again urge the purchase of the Pignatare farm. This adjoins the portion of our property from which we obtain our water supply. A monthly examination of the water has been made by the State Board of Health, and slight evidence of sewage contamination is frequently found. The only apparent source from which this can come is the above-mentioned farm, on which a house is situated within a few hundred feet of our wells. I have recommended an appropriation of \$3,500 for the purchase of the farm.

Grade Crossing.

The abolition of the grade crossing over the Boston & Albany railroad and the substitution therefor of an underpass is an urgent necessity. Each Sunday and holiday from 300 to 500 persons cross the tracks by way of the foot path, and several have narrowly escaped being killed. One of our teams barely missed being hit by a train at Lee's crossing. Serious accidents to several other vehicles have been narrowly averted during the past year.

Milk Supply.

We were unable to get sufficient milk of good quality during the past year, and recently I have made a contract with a group of farmers 8 miles from the sanatorium to supply us for the ensuing year. This requires an additional team and employee to attend to the transportation.

The sanatorium property was originally a stock farm, and is capable, when under a good state of cultivation, of raising sufficient feed for 40 cows. I have recommended, therefore, that an appropriation of \$2,000 be made for the construction of a cow stable, and \$1,500 for the purchase of some cows.

ACKNOWLEDGMENTS.

I beg to acknowledge my indebtedness to the many kind people in Westfield and Springfield who, besides evincing cordial interest in the work of the institution, have freely contributed books, magazines, clothing, Christmas gifts and entertainments. This generosity has aided materially in making the sanatorium life of the patients more contented and happy.

I wish to express my appreciation for the sympathetic co-operation in the sanatorium work of our chaplains, Rev. Fr. Ahearn, his assistant, Rev. Fr. O'Malley, and Rev. Robert Keating Smith; also to the clergymen in the adjoining towns who have frequently volunteered their services.

I gratefully acknowledge the aid I have received from my assistants, the heads of the departments and other employees in carrying on the work of the sanatorium during the past year.

To you, members of the Board of Trustees, I wish to express my deep appreciation for your continued support and confidence.

Respectfully submitted,

HENRY D. CHADWICK,

Superintendent.

REPORT OF THE TREASURER.

To the Trustees of Hospitals for Consumptives.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1911: —

CASH ACCOUNT.			
Balance Dec. 1, 1910,	.	.	\$2,385 90
<i>Receipts.</i>			
<i>Institution Receipts.</i>			
Board of inmates: —			
Private,	.	\$8,457 70	
Cities and towns,	.	13,511 92	
			\$21,969 62
Sales: —			
Food,	.	\$397 55	
Clothing and materials,	.	5 25	
Furnishings,	.	10 50	
Repairs and improvements,	.	48	
Miscellaneous,	.	232 61	
Farm, stable and grounds: —			
Pigs and hogs,	.	922 61	
Sundries,	.	4 00	
			1,573 00
Miscellaneous receipts: —			
Interest on bank balances,	.	\$88 01	
Sundries,	.	16 65	
			104 66
			23,647 28
<i>Receipts from Treasury of Commonwealth.</i>			
Maintenance appropriations: —			
Balance of 1910,	.	\$2,242 64	
Advance money (amount on hand November 30),	.	5,000 00	
Approved schedules of 1911,		\$74,467 83	
Less returned,	.	53 96	
			74,413 87
			81,656 51
Special appropriations,			
Less returned,	.	\$3,263 66	
		4 95	
			3,258 71
Total,	.	.	\$110,948 40

Payments.

To treasury of Commonwealth, institution receipts,	\$23,647 28
Maintenance appropriations: —	
Balance November schedule, 1910,	\$4,628 54
Eleven months' schedules, 1911,	74,413 87
November advances,	3,837 53
	<hr/>
	82,879 94
Special appropriations: —	
Approved schedules,	3,258 71
Balance, Nov. 30, 1911: —	
In bank,	\$983 01
In office,	179 46
	<hr/>
	1,162 47
Total,	<hr/>
	\$110,948 40

MAINTENANCE.

Appropriation,	\$80,000 00
Expenses (as analyzed below),	79,999 89
	<hr/>
Balance reverting to treasury of Commonwealth,	\$0 11

Analysis of Expenses.

Salaries, wages and labor: —	
General administration,	\$13,399 90
Medical service,	4,758 34
Ward service (male),	3,229 64
Ward service (female),	2,561 80
Repairs and improvements,	1,165 52
Farm, stable and grounds,	5, 80 68
	<hr/>
	\$30,595 88
Food: —	
Butter,	\$2,494 66
Butterine,	10 80
Beans,	110 32
Bread and crackers,	63 23
Cereals, rice, meal, etc.,	230 36
Cheese,	125 05
Eggs,	2,388 24
Flour,	195 38
Fish,	866 04
Fruit (dried and fresh),	1,270 59
Meats,	10,018 04
Milk,	5,766 96
Molasses and syrup,	46 32
Sugar,	861 44
Tea, coffee, broma and cocoa,	448 96
Vegetables,	1,473 94
Sundries,	593 73
	<hr/>
	26,964 06
Amount carried forward,	<hr/>
	\$57,559 94

Amount brought forward, \$57,459 94

Clothing and materials: —

Boots, shoes and rubbers,	\$20 75
Clothing,	748 42
Dry goods for clothing and small wares,	10 20
Furnishing goods,	6 91
Leather and shoe findings,	75
Sundries,	5 96

792 99

Furnishings: —

Beds, bedding, table linen, etc.,	\$785 59
Brushes, brooms,	162 62
Carpets, rugs, etc.,	133 58
Crockery, glassware, cutlery, etc.,	307 69
Furniture and upholstery,	471 05
Kitchen furnishings,	647 56
Wooden ware, buckets, pails, etc.,	43 62
Sundries,	430 32

2,982 03

Heat, light and power: —

Coal,	\$1,614 46
Freight on coal,	2,739 28
Wood,	71 70
Oil,	65 50
Sundries,	60 70

4,551 64

Repairs and improvements: —

Steel stalls,	\$326 70
Brick,	10 00
Cement, lime and plaster,	179 54
Doors, sashes, etc.,	87 50
Electrical work and supplies,	299 49
Hardware,	224 28
Lumber,	1,292 64
Machinery, etc.,	483 95
Paints, oil, glass, etc.,	529 06
Plumbing, steam fitting and supplies,	1,219 88
Roofing and materials,	286 90
Sundries,	444 71

5,384 65

Farm, stable and grounds: —

Blacksmith and supplies,	\$109 95
Carriages, wagons, etc., and repairs,	172 45
Fertilizers, vines, seeds, etc.,	802 59
Hay, grain, etc.,	771 06
Harnesses and repairs,	31 91
Other live stock,	15 00
Rent,	5 00
Tools, farm machines, etc.,	491 39
Sundries,	307 53

2,706 88

Amount carried forward, \$73,978 13

Amount brought forward, \$73,978 13

Miscellaneous: —

Books, periodicals, etc.,	\$97 82	
Chapel services and entertainments,	488 57	
Freight, expressage and transportation,	516 87	
Funeral expenses,	20 00	
Ice,	30 08	
Medicines and hospital supplies,	1,997 64	
Medical attendance, nurses, etc. (extra),	20 00	
Postage,	149 64	
Printing and printing supplies,	33 03	
Soap and laundry supplies,	716 41	
Stationery and office supplies,	401 82	
Travel and expenses (officials),	319 86	
Telephone and telegraph,	411 36	
Cuspidor supplies,	472 69	
Sundries,	345 97	
		<hr/>
		6,021 76

Total expenses for maintenance, \$79,999 89

SPECIAL APPROPRIATIONS.

Balance Dec. 1, 1910,	\$1,727 56	
Appropriations for fiscal year,	3,800 00	
		<hr/>
Total,	\$5,527 56	
Expended during the year (see statement annexed),	\$3,258 71	
Reverting to treasury of Commonwealth,	06	
		<hr/>
		3,258 77
		<hr/>
Balance Nov. 30, 1911,	\$2,268 79	

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$1,162 47	
November cash vouchers (paid from advance money),	3,837 53	
Due from treasury of Commonwealth account		
November, 1911, schedule,	586 02	
		<hr/>
		\$5,586 02

Liabilities.

chedule of November bills,	\$5,586 02
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PER CAPITA.

During the year the average number of inmates has been 156.8.

Total cost for maintenance, \$79,999.89.

Equal to a weekly per capita cost of \$9.784 +.

Receipts from sales, \$1,573.

Equal to a weekly per capita of \$0.190 +.

All other institution receipts, \$22,074.28.

Equal to a weekly per capita of \$2.714 +.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Generator,	Acts 1910, chap. 124	\$1,500 00	\$1,032 97	\$1,499 98	\$0 02 ¹
Repairs on barn and purchase of cows,	Acts 1910, chap. 124	1,600 00	396 00	1,600 00	—
Coal bunkers, repairs on farmhouse, a piggery, poultry and henneries, farm tools, corridor and walks, and screens,	Acts 1910, chap. 124	3,650 00	298 55	3,649 98	02 ¹
Recreation building,	Acts 1911, chap. 138	1,800 00	—	—	1,800 00
Enlarging locker room,	Acts 1911, chap. 138	1,000 00	999 98	999 98	02 ¹
Grading,	Acts 1911, chap. 138	1,000 00	531 21	531 21	468 79
		\$10,550 00	\$3,258 71	\$8,281 15	\$2,268 79

¹ Reverting to treasury of the Commonwealth.

Respectfully submitted,

HENRY D. CHADWICK,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

Real estate: —

Cultivated land, 62 acres; wood land, 40 acres; pasture, 28 acres; administration building, service building, four ward buildings, piggery, barn, farmhouse,	\$96,058 00
--	-------------

Personal estate: —

Live stock on farm,	\$3,325 00
Produce of the farm on hand,	1,306 00
Carriages and agricultural implements,	2,666 00
Machinery and mechanical fixtures,	6,994 00
Beds and bedding,	6,132 00
Other furniture,	4,678 00
Personal property of State in superintendent's department,	450 00
Dry goods,	262 00
Provisions and groceries,	798 00
Drugs and medicines,	270 00
Fuel,	182 00
Library,	25 00
Other supplies, undistributed,	418 00
	<hr/>
	27,506 00
	<hr/>
	\$123,564 00

PRODUCE OF FARM.

25 bushels peas.	30 bushels beets.
200 bunches radishes.	90 bushels parsnips.
30 bushels onions.	80 bushels turnips.
30 bushels tomatoes.	900 pounds cabbage.
20 bushels cucumbers.	50 bushels rye.
1,000 pounds squash.	500 bushels corn.
350 dozen sweet corn.	30 tons hay.
300 bushels potatoes.	30 tons hay.
100 bushels carrots.	

Received from sale of hogs and pigs, \$922.61.

Pork used by sanatorium to the value of \$352.20.

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906:—

Population.

	Males.	Females.	Totals.
Number received during the year,	152	171	323
Number passing out of the institution during the year, .	142	173	315
Number at the end of the fiscal year in the institution, .	80	85	165
Daily average attendance (number of inmates actually present) during the year.	79	77.4	156.8
Average number of employees and officers during the year,	41	21	62

Expenditures.

Current expenses:—

1. Salaries and wages,	\$30,595 88	
2. Clothing,	792 99	
3. Subsistence,	26,964 06	
4. Ordinary repairs,	5,384 65	
5. Office, domestic and outdoor expenses,	16,262 31	
Total,	<hr/>	\$79,999 89

Extraordinary expenses:—

1. Permanent improvements to existing buildings,	\$3,258 71	
Total,	<hr/>	3,258 71
Grand total,		<hr/> \$83,268 60

STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients admitted December 1 to November 30, inclusive.	152	171	323
Number of patients discharged December 1 to November 30, inclusive.	142	173	315
Number of deaths (included in preceding item), . . .	44	25	69
Daily average number of patients,	—	—	156.8
Number in sanatorium Dec. 1, 1910,	—	—	157
Number remaining Nov. 30, 1911,	—	—	165

TABLE 2. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Married,	63	75	138
Single,	82	88	170
Widowed,	6	8	14
Divorced,	1	—	1
Totals,	152	171	323

TABLE 3. — *Ages of Patients admitted.*

	Males.	Females.	Totals.
1 to 13 years,	3	9	12
14 to 20 years,	22	27	49
21 to 30 years,	49	83	132
31 to 40 years,	46	38	84
41 to 50 years,	23	11	34
51 to 60 years,	7	2	9
61 to 70 years,	2	1	3
Totals,	152	171	323

TABLE 4.—*Nativity and Parentage of Patients admitted.*

PLACES OF NATIVITY.	MALES.			FEMALES.			TOTALS.		
	Patient.	Father.	Mother.	Patient.	Father.	Mother.	Patient.	Father.	Mother.
United States:—									
Massachusetts,	76	16	20	81	29	25	157	45	45
New England States,	13	7	5	16	10	8	29	23	13
Other States,	8	2	2	2	7	3	10	9	5
Total native,	97	25	27	99	46	36	196	77	63
Other countries:—									
Austria,	2	1	1	3	4	2	5	5	3
Canada,	12	6	8	19	17	25	31	23	33
Denmark,	1	1	2	—	—	—	1	1	2
England,	4	3	4	2	6	5	6	9	9
Finland,	2	5	4	14	10	5	16	15	9
Greece,	—	—	—	1	—	—	1	—	—
Germany,	2	1	3	—	—	2	2	1	5
Ireland,	14	27	20	16	15	25	30	42	45
Italy,	3	5	6	3	3	5	6	8	11
Norway,	1	1	2	1	1	2	2	2	4
Poland,	1	2	3	—	3	3	1	5	6
Russia,	2	1	6	5	3	2	7	4	8
Sweden,	4	3	3	6	5	3	10	8	6
Scotland,	4	5	4	3	4	3	7	9	7
Switzerland,	1	—	—	—	—	—	1	—	—
Turkey,	1	—	—	—	—	—	1	—	—
Total foreign,	54	61	66	73	71	82	127	130	148
Unknown,	—	65	58	—	55	54	—	116	112
Totals,	151	151	151	172	172	172	323	323	323

TABLE 5. — *Residence of Patients admitted.*

PLACE.	Number.	PLACE.	Number.
Adams,	9	Medford,	1
Adamsville,	1	Millbury,	3
Annisquam,	1	Milford,	2
Ashburnham,	1	Mill River,	1
Athol,	3	Millers Falls,	1
Atlantic,	1	Millville,	2
Baldwinsville,	1	Maynard,	1
Bay State,	1	Marlborough,	1
Barre,	1	Newburyport,	1
Boston,	9	Northampton,	5
Cambridge,	1	North Adams,	3
Chester,	1	North Dana,	1
Chicopee,	7	North Brookfield,	1
Clinton,	1	Northfield,	1
Dalton,	2	North Grafton,	2
Deerfield,	1	Orange,	7
Easthampton,	1	Oxford,	1
East Weymouth,	1	Petersham,	1
East Douglas,	1	Pittsfield,	17
Erving,	1	Rutland,	1
Fairview,	1	Roslindale,	1
Fitchburg,	25	Revere,	3
Gardner,	13	Roxbury,	1
Great Barrington,	1	Sheffield,	1
Greenfield,	1	Somerville,	2
Haverhill,	1	Southbridge,	2
Housatonic,	1	Spencer,	2
Holyoke,	21	Springfield,	45
Jefferson,	1	Sterling Junction,	1
Lanesborough,	1	Taunton,	1
Lawrence,	1	Upton,	2
Lee,	1	Wales,	1
Lenox,	1	Ware,	1
Lowell,	1	Waltham,	3
Lunenburg,	1	Wakefield,	1
Lynn,	3	Webster,	1
Merrimac,	1	Westfield,	9
Merrick,	1	West Quincy,	1
Melrose,	1	Worcester,	67

TABLE 6. — *Occupations.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Attendant, . . .	-	2	2	Meat cutter, . . .	1	-	1
At home, . . .	-	3	3	Milliner, . . .	-	1	1
Barber, . . .	3	-	3	Mill hand, . . .	5	10	15
Bookkeeper, . . .	2	-	2	Nurse girl, . . .	-	1	1
Brass worker, . . .	1	-	1	Nurse, . . .	-	2	2
Butler, . . .	2	-	2	Paper maker, . . .	1	-	1
Carriage maker, . . .	1	-	1	Packer, . . .	1	-	1
Carpenter, . . .	4	-	4	Painter, . . .	2	-	2
Chef, . . .	2	-	2	Plumber, . . .	1	-	1
Chair maker, . . .	2	-	2	Porter, . . .	1	-	1
Clerk, . . .	9	8	17	Paper hanger, . . .	1	-	1
Cloak maker, . . .	-	1	1	Railroad engineer, . . .	1	-	1
Conductor, . . .	3	-	3	Roofer, . . .	2	-	2
Comb maker, . . .	1	-	1	Rubber worker, . . .	1	-	1
Dish washer, . . .	1	-	1	Salesman, . . .	2	-	2
Designer, . . .	1	-	1	School-teacher, . . .	1	1	2
Dressmaker, . . .	-	3	3	Shoemaker, . . .	3	-	3
Elevator man, . . .	1	-	1	Slate roofer, . . .	2	-	2
Electrician, . . .	1	-	1	Steel presser, . . .	1	-	1
Expressman, . . .	1	-	1	Stenographer, . . .	-	7	7
Factory hand, . . .	8	15	23	Stone worker, . . .	1	-	1
Farmer, . . .	2	-	2	Student, . . .	3	13	16
Frame fitter, . . .	1	-	1	Storekeeper, . . .	1	-	1
Freight shipper, . . .	1	-	1	Steam fitter, . . .	1	-	1
Grinder, . . .	1	-	1	Tailor, . . .	1	-	1
Grocer, . . .	3	-	3	Teamster, . . .	7	-	7
Housework, . . .	-	32	32	Telephone operator, . . .	-	2	2
Housewife, . . .	-	64	64	Timekeeper, . . .	3	-	3
Iron molder, . . .	1	-	1	Waitress, . . .	-	5	5
Janitor, . . .	2	-	2	Waiters, . . .	5	-	5
Laborer, . . .	8	-	8	Watchman, . . .	1	-	1
Landlady, . . .	-	1	1	Ward maid, . . .	-	1	1
Lineman, . . .	2	-	2	Weaver, . . .	7	-	7
Lithographer, . . .	1	-	1	Wire worker, . . .	3	-	3
Mail carrier, . . .	1	-	1	Wood turner, . . .	1	-	1
Mechanic, . . .	16	-	16	Wood carver, . . .	1	-	1
Metal polisher, . . .	1	-	1				

TABLE 7. — *Condition on Admission.*

	Males.	Females.	Totals.
Incipient,	26	32	58
Moderately advanced,	29	41	70
Far advanced,	95	94	189
Non-tuberculous,	3	4	6
Totals,	152	171	323

TABLE 8. — *Condition of Discharges.*

	Males.	Females.	Totals.
Disease arrested,	26	47	73
Improved,	35	51	86
Unimproved,	30	48	78
Died,	47	32	69
Non-tuberculous,	4	5	9
Totals,	142	173	315

TABLE 9. — *Deaths.*

	DURATION OF DISEASE.			SANATORIUM RESIDENCE.		
	Males.	Females.	Totals.	Males.	Females.	Totals.
Under 1 month,	—	—	—	8	3	11
1 to 3 months,	—	1	1	15	7	23
3 to 6 months,	5	2	7	7	5	12
6 to 9 months,	5	4	9	7	4	11
9 months to 1 year,	11	3	14	3	3	6
1 to 2 years,	14	7	21	4	3	7
2 to 5 years,	7	7	14	—	—	—
5 to 10 years,	2	1	3	—	—	—
Totals,	44	25	69	44	25	69

RUTLAND STATE SANATORIUM.

CONSULTING LARYNGOLOGIST.

A. C. GETCHELL, M.D., . . . WORCESTER.

RESIDENT MEDICAL OFFICERS.

P. CHALLIS BARTLETT, M.D.. . . *Superintendent.*

JAMES A. LYON, M.D., . . . *Physician.*

JOHN M. WISE, M.D., . . . *Physician.*

HERBERT F. GAMMONS, M.D.. . . *Physician.*

CLARENCE V. MURPHY, . . . *Bacteriologist.*

MARY E. THRASHER, . . . *Matron and Superintendant of Nurses.*

CHARLES E. CARROLL, . . . *Steward.*

WALTER C. BROWN, . . . *Chief Engineer.*

FREDERICK H. DRURY, . . . *Farmer.*

The average gain in weight for the year was, men, 11½ pounds, women, 10 pounds. The greatest individual gains were those of a woman, 55 pounds, and a man, 52 pounds.

This sanatorium has been running thirteen years, and in that time 8,649 patients have been admitted.

The subsequent history of patients admitted during the first five years has just been completed, and gives us some very interesting figures: —

Of the class of 1899, 21.1 per cent. are able to work.

Of the class of 1900, 24.5 per cent. are able to work.

Of the class of 1901, 25.2 per cent. are able to work.

Of the class of 1902, 24.3 per cent. are able to work.

Of the class of 1903, 20.5 per cent. are able to work.

This means doing a full day's work.

These same years show that of the class of 1899, 1 per cent. are not able to work, 23.7 per cent. are not traced, and 54 per cent. have died. Of the class of 1900, 1 per cent. are not able to work, 27.5 per cent. are not traced, and 46.8 per cent. have died. Of the class of 1901, .5 per cent. are not able to work, 28.8 per cent. are not traced, and 48.4 per cent. have died. Of the class of 1902, 1.4 per cent. are not able to work, 35.8 per cent. not traced, and 38.4 per cent. have died. Of the class of 1903, 1.4 per cent. are not able to work, 40.5 per cent. not traced, and 37.5 per cent. have died.

This large number of patients, some of whom have worked for eleven years since their discharge from this Sanatorium, have in this time earned the cost of the State's investment. Besides this, there is no better teacher in the tuberculosis work than the discharged ex-patient.

The general medical work during the past year has differed somewhat from previous years, because of the great number of bed cases. Tuberculines and vaccines are being used in about 70 cases on an average. Tuberculin is used, as in former years, on cases that seem to need the stimulation, or where tubercular glands are a complication of the lung condition.

The amount of work done in the laboratory has steadily increased, and it is of the utmost value and assistance in all of our

medical work on the wards. One hundred autogenous bacterial vaccines have been made and used, with good results, in the secondary infections, and a very large number of stock vaccines are constantly being used.

The routine sputum and urine work is constantly being carried on, and the sputum examinations alone total 4,000 a year.

The laboratory also furnished a large amount of buttermilk for the wards. The organism we are now using to prepare this buttermilk gives us the most satisfactory product we have ever used, and is a decided benefit in the treatment of many cases with intestinal disturbance.

The replacing of the Akron sewer pipe with iron pipe is more than half completed, and a great decrease in the amount of surface water emptied onto our sewer beds has already been noticed. The rest of this work will be completed in the early spring.

The new veranda on the infirmary is being built, and will be completed in the early winter.

A new 50 kilowatt dynamo and engine to run it have been contracted for and will soon be in place.

A saw table and motor to run it have been contracted for and are now being set up.

The coming year I wish to ask for the following special appropriations:—

Eight thousand nine hundred and fifty dollars for a horse barn (in wood). The present horse barn is badly out of repair, and the frame is in such a condition that it does not seem an economy to spend much money repairing it.

The mile of road across the sanatorium grounds needs rebuilding. The State engineer's office estimates that it will cost \$1,400 to do this work properly.

The nurses' home has no hydrant near it. We also need more hose and fire extinguishers. To do this work would cost \$400.

We are doing a great amount of repairing on most of our buildings, and need more room in our carpenter shop, and more machinery. I should like to ask for \$1,200 for this purpose. \$700 for the addition to the carpenter shop, and \$500 for machinery.

There have been no changes in our medical staff during the past year.

I wish to thank the many friends of the sanatorium for their unfailing generosity during the year. I am indebted to the officers and many of the faithful employees who have assisted in conducting the operations of the sanatorium.

I wish to express my personal gratitude to your Board for their assistance and support.

Respectfully submitted,

P. CHALLIS BARTLETT.

REPORT OF THE TREASURER.

To the Trustees of Rutland State Sanatorium.

I respectfully submit the following report of the finances of this institution for the fiscal year ending Nov. 30, 1911:—

CASH ACCOUNT.	
Balance Dec. 1, 1911,	\$2,566 92
<i>Receipts.</i>	
<i>Institution Receipts.</i>	
Board of inmates:—	
Private,	\$26,443 06
Reimbursements, insane, (charitable association),	455 91
Cities and towns,	16,399 27
Reimbursements, charitable (State aid),	586 77
	\$43,885 01
Sales:—	
Food,	\$1,250 73
Clothing and materials,	122 90
Furnishings,	3 37
Repairs and improvements,	10 38
Miscellaneous,	970 48
Farm, stable and grounds:—	
Cows and calves,	319 75
Pigs and hogs,	1,399 85
Sundries,	19 92
	4,097 38
Miscellaneous receipts:—	
Interest on bank balances,	\$148 41
Sundries,	101 89
	250 30
	48,232 69
<i>Receipts from Treasury of Commonwealth.</i>	
Maintenance appropriations:—	
Deficiency, 1910,	\$3,963 11
Balance of 1910,	133 86
Advance money (amount on hand Novem- ber 30),	10,000 00
Approved schedules of 1911,	\$160,665 11
Less returned,	46 42
	160,618 69
	174,715 66
Special appropriations,	2,774 45
	\$228,289 72
Total,	

Payments.

To treasury of Commonwealth, institution receipts,		\$48,232 69
Maintenance appropriations: —		
Balance November schedule, 1910,	6,663 89	
Eleven months' schedules, 1911,	160,618 69	
November advances,	5,032 76	
	<hr/>	172,315 34
Special appropriations: —		
Approved schedules, less advances, last year's report,	\$2,774 45	
November advances,	251 64	
	<hr/>	3,026 09
Balance Nov. 30, 1911: —		
In bank,	\$4,294 05	
In office,	421 55	
	<hr/>	4,715 60
		<hr/>
Total,		\$228,289 72

MAINTENANCE.

Appropriation,	\$184,000 00
Expenses (as analyzed below),	178,781 20
	<hr/>
Balance reverting to treasury of Commonwealth,	\$5,218 80

Analysis of Expenses.

Salaries, wages and labor: —		
General administration,	\$41,265 79	
Medical service,	4,210 68	
Ward service (male),	1,459 05	
Ward service (female),	6,457 61	
Repairs and improvements,	2,164 13	
Farm, stable and grounds,	8,087 11	
	<hr/>	\$63,644 37
Food: —		
Butter,	\$4,802 07	
Butterine,	163 21	
Beans,	145 16	
Bread and crackers,	77 56	
Cereals, rice, meal, etc.,	696 56	
Cheese,	93 79	
Eggs,	9,247 27	
Flour,	2,115 60	
Fish,	1,978 50	
Fruit (dried and fresh),	2,348 58	
Meats,	28,290 97	
Milk,	8,902 38	
Molasses and syrup,	43 20	
Sugar,	2,425 19	
Tea, coffee, broma and cocoa,	1,057 98	
Vegetables,	4,043 36	
Sundries,	384 40	
	<hr/>	66,815 78
		<hr/>
Amount carried forward,		\$130,460 15

<i>Amount brought forward,</i>			\$130,460 15
Clothing and materials:—			
Boots, shoes and rubbers,		\$18 70	
Clothing,		62 89	
Dry goods for clothing and small wares,		25	
Hats and caps,		1 25	
			83 09
Furnishings:—			
Beds, bedding, table linen, etc.,		\$4,816 78	
Brushes, brooms,		203 53	
Carpets, rugs, etc.,		110 97	
Crockery, glassware, cutlery, etc.,		867 16	
Furniture and upholstery,		258 20	
Kitchen furnishings,		687 54	
Wooden ware, buckets, pails, etc.,		118 44	
Sundries,		121 84	
			7,184 ⁷ / ₄ 46
Heat, light and power:—			
Coal,		\$10,762 98	
Transportation of coal,		1,656 90	
Wood,		80 75	
Oil,		238 11	
Sundries,		498 94	
			13,237 68
Repairs and improvements:—			
Brick,		\$164 69	
Cement, lime and plaster,		224 15	
Doors, sashes, etc.,		266 73	
Electrical work and supplies,		524 31	
Hardware,		283 69	
Lumber,		266 83	
Machinery, etc.,		29 28	
Paints, oil, glass, etc.,		884 50	
Plumbing, steam fitting and supplies,		721 98	
Roofing and materials,		48 40	
Sundries,		373 11	
			3,787 67
Farm, stable and grounds:—			
Blacksmith and supplies,		\$193 55	
Carriages, wagons, etc., and repairs,		457 90	
Fertilizers, vines, seeds, etc.,		1,004 78	
Hay, grain, etc.,		5,178 20	
Harnesses and repairs,		151 30	
Horses,		300 00	
Other live stock,		1,040 90	
Tools, farm machines, etc.,		91 97	
Sundries,		977 74	
			9,396 34
Miscellaneous:—			
Books, periodicals, etc.,		\$129 34	
Chapel services and entertainments,		596 50	
Freight, expressage and transportation,		893 67	
Funeral expenses,		20 00	
Hose, etc.,		15 00	
<i>Amounts carried forward,</i>		\$1,654 51	\$164,149 39

<i>Amounts brought forward,</i>	\$1,654 51	\$164,149 39
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Miscellaneous — *Con.*

Medicines and hospital supplies,	3,830 46	
Medical attendance, nurses, etc. (extra),	15 00	
Postage,	699 40	
Printing and printing supplies,	610 17	
Return of runaways, cuspidor supplies,	1,541 79	
Soap and laundry supplies,	1,347 26	
Stationery and office supplies,	617 04	
Travel and expenses (officials),	167 83	
Telephone and telegraph,	840 99	
Water,	2,663 29	
Sundries,	644 07	
	<hr/>	14,631 81

Total expenses for maintenance,	\$178,781 20
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SPECIAL APPROPRIATIONS.

Appropriations for fiscal year,	\$7,945 00
Expended during the year (see statement annexed),	2,774 45
	<hr/>
Balance November 30, 1911,	\$5,170 55

RESOURCES AND LIABILITIES.

Resources.

Cash on hand,	\$4,715 60	
November cash vouchers (paid from advance money):—		
Maintenance,	\$5,032 76	
Special,	251 64	
	<hr/>	5,284 40
Due from treasury of Commonwealth account November, 1911, schedule,	8,162 51	
	<hr/>	\$18,162 51

Liabilities.

Schedule of November bills,	\$18,162 51
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PER CAPITA.

During the year the average number of inmates has been 345.

Total cost for maintenance, \$178,781.20.

Equal to a weekly per capita cost of \$9.933.

Receipts from sales, \$4,097.38.

Equal to a weekly per capita of \$0.226.

All other institution receipts, \$44,135.31.

Equal to a weekly per capita of \$2.460.

Special Appropriations.

OBJECT.	Act or Resolve.	Whole Amount.	Expended during Fiscal Year.	Expended to Date.	Balance at End of Year.
Dynamo,	Res. 1911, chap. 105	\$2,850 00	\$3 75	\$3 75	\$2,846 25
Machinery,	Res. 1911, chap. 105	300 00	138 00	138 00	162 00
Iron pipe,	Res. 1911, chap. 105	1,975 00	1,298 96	1,298 96	676 04
Veranda,	Res. 1911, chap. 105	965 00	769 62	769 62	195 38
Infirmary,	Res. 1911, chap. 105	865 00	—	—	865 00
Furnishing infirmary,	Res. 1911, chap. 105	390 00	—	—	390 00
Covering bridge,	Res. 1911, chap. 105	150 00	125 42	125 42	24 58
Ambulance,	Res. 1911, chap. 105	450 00	438 70	438 70	11 30
		\$7,945 00	\$2,774 45	\$2,774 45	\$5,170 55

Respectfully submitted,

P. CHALLIS BARTLETT,

Treasurer.

Examined and found correct as compared with the records in the office of the Auditor of the Commonwealth.

WARREN A. MERRILL,

Assistant Supervisor of Accounts.

VALUATION.

INVENTORY.

Land.

Grounds and building sites, 12 acres,	\$6,000 00	
Woodland, 88 acres,	2,816 00	
Mowing, 99 acres,	8,910 00	
Tillage, 37 acres,	3,330 00	
Pasture, 108 acres,	2,376 00	
Roads and sewerage system,	20,000 00	
Miscellaneous, 21 acres,	2,100 00	
		<hr/>
Total,		\$45,532 00

Buildings.

Institution buildings,	\$443,181 00	
Farm, stable and grounds.	20,620 00	
Miscellaneous,	3,800 00	
		<hr/>
Total,		467,601 00
		<hr/>
Grand total,		\$513,133 00

STATEMENT OF PRESENT VALUE OF ALL PERSONAL PROPERTY AS PER INVENTORY TAKEN DEC. 1, 1911.

Food,	\$1,364 75	
Clothing and clothing material,	125 00	
Furnishings,	19,835 53	
Heat, light and power,	1,340 77	
Repairs and improvements.	867 39	
Farm, stable and grounds,	14,236 08	
Miscellaneous,	3,779 54	
		<hr/>
Total,		\$41,549 06

FINANCES.

Total appropriation for maintenance for 1911, . . .	\$184,000 00
Total expenditures for maintenance in 1911, . . .	178,781 20
Salaries, wages and labor, . . .	\$63,644 37
All other expenses, . . .	115,136 83
Average weekly per capita cost, . . .	9.933
Total valuation of real estate, . . .	513,133 00
Land, . . .	\$45,532 00
Buildings, . . .	467,601 00
Total valuation of personal estate, . . .	41,549 06
Total appropriation for special purposes, 1911, . . .	7,945 00
Total expenditures for special purposes, 1911, . . .	2,744 45
Dynamo, . . .	\$3 75
Machinery, . . .	138 00
Iron pipe, . . .	1,298 96
Veranda, . . .	769 62
Covering bridge, . . .	125 42
Ambulance, . . .	438 70

FARM ACCOUNT.

DR.

Products of the farm on hand, as estimated Dec.		
1, 1910,	\$2,277 10	
Stock on hand, as estimated Dec. 1, 1910, . . .	314 26	
		<u>\$2,591 36</u>

General expense:—

Blacksmith,	\$122 00	
Coal,	124 91	
Fertilizer,	843 75	
Hardware,	10 03	
Harness repairs,	119 50	
Hay and grain,	3,844 82	
Horse,	300 00	
Labor,	5,991 11	
Other live stock,	232 00	
Seed, shrubbery, etc.,	122 66	
Shavings,	61 03	
Sundries,	123 73	
Teaming (outside),	543 06	
Tools,	37 74	
		<u>\$12,476 34</u>

Material, etc., produced by other departments
of sanatorium for farm department:—

Board of employees,	\$1,552 50	
Engineer department,	1 00	
Painter department,	1 00	
Waste, sanatorium kitchen,	200 60	
		<u>1,755 10</u>
		<u>14,231 44</u>
		<u>\$16,822 80</u>

CR.

Produce of farm delivered to sanatorium:—

Apples, 11 barrels, at \$2.25 to \$3.50,	\$29 85
Beets, 112½ bushels, at \$0.75 to \$1.25,	87 38
Beans (wax), 17 bushels, at \$0.75 to \$1.00,	16 50
Beans (shell), 17 bushels, at \$1.00,	17 00
Celery (season), 13 bushels, at \$0.50,	6 50
Cucumbers (pickling), 1,986, at \$0.00½,	49 33
Cucumbers, 181½ dozen, at \$0.20,	36 30
	<u>\$242 86</u>
Amount carried forward,	\$242 86

<i>Amount brought forward,</i>		\$242 86	
Carrots, 142½ bushels, at \$0.60 to \$2.40,		99 10	
Cabbage, 5,426 pounds, at \$0.01 to \$0.02,		61 98	
Corn, 7,745 dozen, at \$0.10 to \$0.12,		82 10	
Cauliflower, 69 dozen, at \$1.00 to \$1.50,		88 00	
Cider, 10 gallons, at \$0.08,		80	
Lettuce, 227 dozen, at \$0.36 to \$0.75,		109 08	
Leeks, 30 bunches, at \$0.50,		15 00	
Milk, 124,312 quarts, at \$0.04½,		5,594 04	
Onions, 12½ bushels, at \$0.43 to \$1.50,		13 09	
Onions (top), 1,039 bunches, at \$0.04,		41 56	
Peppers, 3½ bushels, at \$0.75 to \$1.75,		3 88	
Parsley, 3½ pecks, at \$1.60,		5 60	
Parsnips, 19 bushels, at \$0.90 to \$1.50,		19 95	
Peas, 4 bushels, at \$1.50,		6 00	
Pork, 5,442 pounds, at \$0.08 to \$0.10¾,		497 14	
Rhubarb, 1,497 pounds, at \$0.01,		22 48	
Radishes, 2,489 bunches, at \$0.02½,		62 20	
Squash (summer), 113½ dozen, at \$0.20 to \$0.30,		29 45	
Squash (marrow), 2,889 pounds, at \$0.02½ to \$0.01½,		41 42	
Squash (winter), 1,378 pounds, at \$0.01 to \$0.01½,		16 70	
Spinach, 14 bushels, at \$1.25,		17 50	
Tomatoes (green), 63 bushels, at \$0.50,		31 50	
Tomatoes (ripe), 87½ bushels, at \$1.00 to \$2.00,		115 23	
Turnips, 136 bushels, at \$0.45 to \$1.25,		75 08	
Vinegar, 103 gallons, at \$0.11,		11 33	
			\$7,303 07
Sales: —			
Live stock, cows and calves,		\$319 75	
Pork, 23,570 pounds,		1,399 85	
Hay and grain,		19 92	
			1,739 52
Sanatorium, board of driving and express horses, 5 at \$20, 12 months,		\$1,200 00	
Service, labor and teaming for sanatorium, putting in ice, hauling provisions, filter beds, etc.,		1,869 77	
			3,069 77
Stock: —			
Products of farm on hand, as estimated Dec. 1, 1911,		\$2,035 00	
Stock on hand Dec. 1, 1911,		543 75	
			2,578 75
			\$14,691 11
Deficit against farm,			\$2,131 69

POULTRY DEPARTMENT.

	Dr.	
Stock,		\$1,149 27

General expense: —

Grain and feed,	\$1,396 17
Poultry,	807 90
Eggs,	6 88
Water,	5 27
Oil,	9 36
Straw,	8 57
Coal,	52 67
Shavings,	10 08
Sundries,	14 41
Salaries and wages,	794 78

Repairs and improvements: —

Lumber,	66 60
Hardware,	40
Roofing paper,	2 40
Cement, etc.,	2 18

 \$3,177 67

Material, etc., produced by other departments of sanatorium for poultry department: —

Board of employees,	\$310 67
Farm department (teaming),	74 55

 385 22

 3,562 89

 \$4,712 16

CR.

Products of poultry department delivered to sanatorium: —

Poultry, 3,717 pounds,	\$553 03	
Eggs, 6,896 $\frac{7}{12}$ dozen,	1,758 59	
Fertilizer, 186 barrels,	93 00	
54 loads,	27 00	
Sundries,	3 51	
	<hr/>	\$2,435 13

Stock: —

Eggs,	\$2 70	
Grain and feed,	69 17	
Poultry,	1,574 44	
Sundries,	12 74	
	<hr/>	1,659 05
		<hr/>
		\$4,094 18

Deficit against poultry department, \$617 98

SPECIAL REPORT.

The following special report is prepared in accordance with a resolution of the National Conference of Charities and Corrections, adopted May 15, 1906: —

Population.

	Males.	Females.	Totals.
Number of patients present at beginning of fiscal year, .	178	172	340
Number received during year,	254	277	531
Number discharged during year,	255	287	542
Number of deaths included in preceding item,	37	15	52
Number at end of fiscal year,	177	162	339
Daily average attendance (i.e.), number of inmates actually present during year.	179	166	345
Average number of officers and employees during year, .	125	76	201

Expenditures.

Current expenses: —

1. Salaries and wages,	\$63,644 37	
2. Clothing,	83 09	
3. Subsistence,	66,815 78	
4. Ordinary repairs,	3,787 67	
5. Office, domestic and outdoor ex- penses,	44,450 29	
		\$178,781 20

Extraordinary expenses: —

1. Permanent improvements to existing buildings, .	769 62
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Grand total,	\$179,550 82
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STATISTICAL TABLES.

TABLE 1. — *Admissions and Discharges.*

	Males.	Females.	Totals.
Number of patients in sanatorium Dec. 1, 1910, . . .	178	172	340
Number admitted Nov. 30, 1910, to Dec. 1, 1911, . . .	254	277	531
Number discharged Nov. 30, 1910, to Dec. 1, 1911, . . .	255	287	542
Number remaining in sanatorium Nov. 30, 1911, . . .	177	162	339
Daily average number of patients,	179	166	345
Died (included in number discharged),	37	15	52

TABLE 2. — *Monthly Admissions and Discharges with Average Monthly Population.*

MONTH.	ADMITTED.			DISCHARGED.			Daily Average.
	Males.	Females.	Totals.	Males.	Females.	Totals.	
1910.							
December, . . .	28	20	48	31	24	55	345
1911.							
January, . . .	30	24	54	27	25	52	344
February, . . .	18	20	38	15	20	35	346
March, . . .	11	22	33	11	24	35	347
April, . . .	19	18	37	27	18	45	343
May, . . .	41	40	81	33	43	76	339
June, . . .	17	22	39	11	20	31	350
July, . . .	11	15	26	17	11	28	347
August, . . .	19	23	42	17	28	45	345
September, . . .	15	36	51	20	32	52	343
October, . . .	21	17	38	23	20	43	345
November, . . .	24	20	44	23	22	45	346
Totals, . . .	254	277	531	255	287	542	—

TABLE 3. — *Admissions and Discharges since the Opening of the Sanatorium.*

	Number.	Per Cent.
Admitted,	8,649	—
Discharged,	8,310	—
Not considered,	1,540	—
Considered,	6,770	—
Arrested and apparently cured,	3,257	48.10
Improved,	2,792	41.24
Not improved,	721	10.65
Died,	123	—

TABLE 4. — *Civil Condition of Patients admitted.*

	Males.	Females.	Totals.
Single,	147	145	292
Married,	102	110	212
Widowed,	3	20	23
Divorced,	2	1	3
Separated,	—	1	1
Totals,	254	277	531

TABLE 5. — *Age of Patients admitted.*

	Males.	Females.	Totals.
Under 14 years,	—	2	2
14 to 20 years,	43	43	86
20 to 30 years,	106	124	230
30 to 40 years,	70	76	146
40 to 50 years,	24	30	54
Over 50 years,	11	2	13
Total,	254	277	531

TABLE 6. — *Stage of Disease at Admission.*

	Males.	Females.	Totals.	Per Cent.
Incipient,	40	84	124	23.35
Moderately advanced,	138	123	261	49.15
Far advanced,	67	59	126	23.74
Not classified,	9	11	20	3.76
Totals,	254	277	531	—

TABLE 7. — *Nativity of Patients admitted.*

PATIENTS BORN IN —	Males.	Females.	Totals.	FATHERS BORN IN —	Males.	Females.	Totals.
United States,	188	193	381	United States,	—	—	—
Ireland,	13	20	33	Ireland,	64	46	110
Canada,	10	23	33	Canada,	13	21	34
Russia,	12	11	23	Russia,	3	2	5
Sweden,	6	8	14	Sweden,	8	2	10
Germany,	3	2	5	Germany,	8	7	15
Scotland,	3	2	5	Scotland,	1	3	4
England,	9	9	18	England,	6	6	12
Italy,	4	1	5	Italy,	2	2	4
Prince Edward Island,	—	3	3	Prince Edward Island,	1	1	2
Austria,	2	—	2	Austria,	—	1	1
France,	—	—	—	France,	2	—	2
Newfoundland,	2	1	3	Newfoundland,	3	—	3
Portugal,	1	1	2	Portugal,	—	—	—
Turkey,	—	1	1	Turkey,	—	—	—
Syria,	1	—	1	Syria,	—	—	—
Norway,	—	—	—	Norway,	1	—	1
Finland,	—	2	2	Finland,	1	—	1
Azores,	—	—	—	Azores,	1	—	1
Totals,	254	277	531	Totals,	114	91	205

TABLE 8. — *Residence of Patients admitted.*

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Boston,	86	86	172	New Bedford,	1	2	3
Worcester,	21	20	41	Lawrence,	5	6	11
Cambridge,	7	10	17	Pittsfield,	2	—	2
Lynn,	9	11	20	Gardner,	2	5	7
Brockton,	7	1	8	Fitchburg,	3	4	7
Somerville,	4	4	8	Haverhill,	4	1	5
Attleborough,	7	10	17	Malden,	4	6	10
Fall River,	4	5	9	Springfield,	3	4	7
Lowell,	4	6	10	Hyde Park,	3	1	4

TABLE 8. — *Residence of Patients admitted* — Continued.

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Chelsea,	3	3	6	Barre,	-	1	1
Brookline,	-	1	1	Newburyport,	3	1	4
Everett,	4	3	7	North Grafton,	2	-	2
Salem,	2	3	5	Shelburne,	-	1	1
Athol,	-	1	1	Northampton,	-	2	2
Arlington,	-	2	2	Quincy,	1	1	2
Holyoke,	2	3	5	Easton,	-	2	2
Watertown,	1	1	2	Sutton,	1	1	2
Framingham,	1	2	3	Medway,	1	-	1
Gloucester,	2	-	2	Spencer,	1	-	1
Waltham,	5	-	5	Winchendon,	-	2	2
Woburn,	1	3	4	Holliston,	-	1	1
Revere,	1	-	1	Chicopee Falls,	-	1	1
Newton,	2	2	4	Webster,	1	1	2
Rutland,	7	10	17	Marlborough,	1	3	4
Medford,	3	4	7	Beverly,	-	3	3
Milton,	3	-	3	Winchester,	1	-	1
Manomet,	-	1	1	Millville,	1	1	2
Canton,	-	1	1	Milford,	3	2	5
North Chelmsford,	-	1	1	Stoughton,	1	-	1
Westminster,	1	-	1	Rockland,	2	2	4
Saugus,	1	-	1	Whitman,	3	3	6
Holden,	1	-	1	Hopedale,	1	1	2
Amherst,	1	-	1	Hudson,	1	1	2
Lenox,	-	1	1	Amesbury,	2	-	2
Cohasset,	1	-	1	Otter River,	-	1	1
Taunton,	1	-	1	Byfield,	-	1	1
Brookfield,	-	2	2	Baldwinsville,	-	2	2
Hull,	1	-	1	Methuen,	-	1	1
Turners Falls,	-	1	1	Needham,	1	1	2
West Dennis,	-	1	1	South Yarmouth,	-	1	1
Leominster,	-	1	1	Norwood,	1	-	1
Braintree,	1	-	1	Plymouth,	-	1	1
Auburn,	-	1	1	Franklin,	1	-	1
Wollaston,	-	1	1	West Wrentham,	1	-	1
Northbridge,	-	1	1	Groton,	-	1	1

TABLE 8. — *Residence of Patients admitted* — Concluded.

CITIES AND TOWNS.	Males.	Females.	Totals.	CITIES AND TOWNS.	Males.	Females.	Totals.
Walpole,	1	1	2	Wakefield,	-	1	1
North Andover,	1	-	1	Ipswich,	1	1	2
Reading,	-	2	2	Totals,	254	277	531
East Dennis,	-	1	1				

TABLE 9. — *Occupations.*

	Males.	Females.	Totals.		Males.	Females.	Totals.
Auctioneer,	1	-	1	Factory,	61	47	109
Attendant,	4	5	9	Farmer,	2	-	2
Barber,	3	-	3	Fireman,	1	-	1
Bartender,	3	-	3	Governess,	-	1	1
Blacksmith,	3	-	3	General work,	6	4	10
Bookbinder,	-	1	1	Housewife,	-	110	110
Bookkeeper,	3	5	8	Housework,	-	10	10
Bootblack,	1	-	1	Insurance,	1	-	1
Brakeman,	1	-	1	Iron worker,	3	-	3
Bottler,	1	-	1	Janitor,	2	-	2
Bundle girl,	-	1	1	Laborer,	6	-	6
Carpenter,	5	-	5	Laundry,	-	3	3
Chauffeur,	3	-	3	Letter carrier,	2	-	2
Cigar maker,	3	-	3	Nursemaid,	-	1	1
Clerk,	24	10	34	Machinist,	8	-	8
Conductor, street railway,	2	-	2	Mechanic,	1	-	1
Cook,	1	2	3	Milliner,	-	1	1
Cutter,	1	-	1	Motorman,	2	-	2
Civil engineer,	1	-	1	No work,	-	5	5
Dentist,	1	-	1	Nurse, trained,	-	4	4
Domestic,	-	13	13	Nurse, student,	-	1	1
Draughtsman,	3	-	3	Painter,	4	-	4
Dressmaker,	-	5	5	Pedler,	5	-	5
Druggist,	2	-	2	Photographer,	1	-	1
Errand boy,	1	-	1	Plasterer,	1	-	1
Elevator man,	1	-	1	Polisher,	1	-	1

TABLE 9. — *Occupations* — Concluded.

	Males.	Females.	Totals.		Males.	Females.	Totals.
Porter,	1	-	1	Upholsterer,	2	-	2
Printer,	2	-	2	Milk inspector,	1	-	1
Plumber,	2	-	2	Electroplater,	2	-	2
Press feeder,	-	1	1	Lineman,	1	-	1
Sailor,	1	-	1	Molder,	1	-	1
Salespeople,	11	9	20	Silversmith,	1	-	1
Seamstress,	-	2	2	Hostler,	1	-	1
Shipper,	5	-	5	Egg inspector,	1	-	1
Stenographer,	-	5	5	Mason,	1	-	1
Stone cutter,	3	-	3	Steam fitter,	2	-	2
Student,	11	19	30	Cable splicer,	1	-	1
Tailor,	3	-	3	Lecturer,	1	-	1
Teacher, school,	2	5	7	Bundle girl,	-	1	1
Teamster,	16	-	16	Librarian,	-	1	1
Telephone operator,	-	2	2	Gardener,	1	-	1
Tool maker,	2	-	2	Merchant,	1	-	1
Waiter,	2	3	5	Totals,	254	277	521
Baggage master,	1	-	1				

TABLE 10. — *Classification of Results (National Association Classification).*

	INCIPIENT.				MODERATELY ADVANCED.				FAR ADVANCED.				TOTALS.			
	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.
Apparently cured, . . .	14	37	51	35.90	20	23	43	17.47	1	-	1	.88	35	60	95	18.96
Arrested, . . .	22	26	48	33.80	51	44	95	38.61	7	7	14	12.38	80	77	157	31.33
Improved, . . .	10	30	40	28.16	36	39	75	30.48	17	16	33	29.20	63	85	148	29.54
Not improved, . . .	2	1	3	2.11	17	16	33	13.41	39	26	65	57.52	58	43	101	20.15
Totals, . . .	48	94	142	28.34	124	122	246	49.10	64	49	113	22.55	236	265	501	-
Number not considered, . .	-	-	-	-	-	-	-	-	-	-	-	-	19	22	41	-
Total number discharged, .	-	-	-	-	-	-	-	-	-	-	-	-	255	287	542	-

TABLE 11. — *Comparison of Percentages of Results of Treatment of Incipient Cases since the Adoption of the National Association Classification.*

	1905.	1906.	1907.	1908.	1909.	1910.	1911.
Apparently cured,	39.2	50.4	56.1	33.0	61.5	21.8	35.9
Arrested,	46.7	40.1	26.8	46.5	25.6	40.5	33.8
Improved,	12.0	8.9	16.3	17.3	10.8	28.6	28.1
Not improved,	2.0	.6	.7	3.0	1.9	9.0	2.1

TABLE 12. — *Deaths, Duration of Disease, Length of Stay in Sanatorium, and Cause of Death.*

No.	DURATION.	Length of Stay.	Cause of Death.
8111	Unknown,	21 days,	Pulmonary tuberculosis.
8087	18 months,	1 month, 5 days,	Tubercular pneumonia and pulmonary tuberculosis.
7717	Unknown,	6 months, 28 days,	Pulmonary tuberculosis.
7905	3 years,	3 months, 27 days,	Pulmonary tuberculosis.
8037	15 months,	2 months, 4 days,	Pulmonary tuberculosis.
7897	5 months,	4 months, 8 days,	Hemoptysis and pulmonary tuberculosis.
7864	6 months,	4 months, 24 days,	Pulmonary and laryngeal tuberculosis.
8135	Unknown,	28 days,	Pulmonary tuberculosis.
8167	Unknown,	18 days,	Pulmonary tuberculosis.
7043	8 months,	18 months, 15 days,	Pulmonary tuberculosis.
8203	Unknown,	9 days,	Nephritis and pulmonary tuberculosis.
8020	3 years,	3 months, 17 days,	Pulmonary tuberculosis.
7785	Unknown,	7 months, 24 days,	Arteriosclerosis, edema and pulmonary tuberculosis.
8048	11 months,	3 months, 28 days,	Pulmonary tuberculosis.
7914	4 months,	6 months, 1 day,	Abdominal and pulmonary tuberculosis.
8224	Unknown,	1 month, 7 days,	Pulmonary tuberculosis.
8273	Unknown,	1 day,	Pneumothorax and pulmonary tuberculosis.
8131	Unknown,	3 months, 6 days,	Pulmonary tuberculosis.
8161	7 months,	2 months, 20 days,	Pulmonary tuberculosis.
8061	1 year,	4 months, 19 days,	Hemoptysis and pulmonary tuberculosis.
7499	6 months,	11 months, 8 days,	Tubercular pneumonia and pulmonary tuberculosis.
8163	1 year,	3 months, 18 days,	Laryngeal and pulmonary tuberculosis.
7986	6 months,	6 months, 20 days,	Pulmonary tuberculosis.
8232	1 year,	2 months, 15 days,	Pulmonary tuberculosis.
8239	15 months,	2 months, 20 days,	Laryngeal and pulmonary tuberculosis.
8150	13 months,	4 months, 13 days,	Pulmonary tuberculosis.
8322	Unknown,	23 days,	Pulmonary tuberculosis.
8025	8 months,	7 months, 3 days,	Pulmonary tuberculosis.

TABLE 12. — *Deaths, Duration of Disease, etc.* — Concluded.

No.	DURATION.	Length of Stay.	Cause of Death.
8393	Unknown, . .	19 days,	Pulmonary tuberculosis.
8245	6 months, . .	4 months, 8 days, .	Pulmonary tuberculosis.
8395	Unknown, . .	1 month, 9 days, . .	Hiccough and pulmonary tuberculosis.
8103	10 months, . .	1 month, 13 days, .	Laryngeal and pulmonary tuberculosis.
8319	10 months, . .	3 months, 9 days, .	Pulmonary tuberculosis.
8144	5 years, . .	7 months, 16 days, .	Laryngeal and pulmonary tuberculosis.
8165	1 year, . .	7 months, 6 days, .	Laryngeal and pulmonary tuberculosis.
8425	4 years, . .	2 months, 12 days, .	Pulmonary tuberculosis.
8488	Unknown, . .	15 days,	Tubercular pneumonia and pulmonary tuberculosis.
8124	1 year, . .	9 months, 5 days, .	Pulmonary tuberculosis.
8179	15 months, . .	8 months, 19 days, .	Pulmonary tuberculosis.
8197	9 months, . .	8 months, 9 days, .	Pulmonary tuberculosis.
7988	Unknown, . .	11 months, 29 days, .	Cancer of abdomen and pulmonary tuberculosis.
8296	30 months, . .	6 months, 6 days, .	Pneumothorax and pulmonary tuberculosis.
8338	8 years, . .	5 months, 20 days, .	Pulmonary tuberculosis.
8290	7 years, . .	7 months, 16 days, .	Pulmonary tuberculosis.
8505	7 months, . .	2 months, 18 days, .	Pneumothorax and pulmonary tuberculosis.
8596	Unknown, . .	25 days,	Pulmonary tuberculosis.
8436	3 years, . .	5 months,	Laryngeal and pulmonary tuberculosis.
8095	3 years, . .	12 months,	Pulmonary tuberculosis.
8060	1 year, . .	11 months, 18 days, .	Hemoptysis and pulmonary tuberculosis.
8458	6 months, . .	4 months, 13 days, .	Tubercular pneumonia.
6918	3 years, . .	30 months, 7 days, .	Pulmonary tuberculosis.
7929	6 years, . .	14 months, 22 days, .	Pulmonary tuberculosis.

Climatological Data, Rutland State Sanatorium, Rutland, Altitude, 1,160 Feet, for the Official Year beginning Dec. 1, 1910, and ending Nov. 30, 1911.

DATE.	Mean Tempera- ture (Degrees).	Clear Days.	Partly Cloudy Days.	Cloudy Days.	Days with Rain or Snow.	Precipita- tion (Rain).	Precipita- tion (Snow).	Total Wind (Miles).	Wind Average Per Hour (Miles).	Mean Relative Humidity (Per Cent.).
1910.										
December,	20.2	13	7	11	7	2.53	4.37	7,843.5	10.5	77.7
1911.										
January,	25.5	11	4	16	10	2.99	.90	8,037.7	11.5	76.9
February,	20.9	11	5	12	8	2.23	12.30	7,451.6	11.1	74.3
March,	29.0	15	4	12	12	3.83	13.10	8,911.1	12.0	64.1
April,	42.6	17	6	7	6	2.47	9.80	7,168.1	10.3	55.0
May,	60.8	17	8	6	4	1.87	—	7,399.9	9.9	60.2
June,	62.4	11	9	10	6	2.65	—	5,673.0	7.7	69.3
July,	73.3	17	8	6	5	2.62	—	6,087.8	8.2	64.3
August,	66.8	15	7	9	10	6.19	—	5,422.4	7.3	71.4
September,	59.0	15	8	7	12	3.07	—	5,693.9	7.9	75.5
October,	48.0	15	5	11	17	5.42	1.50	6,595.8	8.8	73.2
November,	35.0	15	7	8	11	4.06	2.10	8,671.2	12.0	71.4
Totals,	543.5	172	78	115	108	39.93	44.07	84,956.0	117.2	833.3
Averages,	45.3	14+	6+	9+	9	3.33	6.29	7,079.7	9.8	69.4

Present Condition (Subsequent History) of Patients admitted during the First Five Years of the Sanatorium's Existence.

	ABLE TO WORK.				NOT ABLE TO WORK.				NOT TRACED.				DEAD.				Total.	Admitted but not considered.	Grand Total.
	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.	Males.	Females.	Totals.	Per Cent.			
1899,	33	48	81	21.1	3	1	4	1.0	42	49	91	23.7	128	79	207	54.0	333	12	395
1900,	29	42	71	24.5	1	2	3	1.0	48	32	80	27.5	72	64	136	46.8	290	28	318
1901,	46	41	87	25.2	1	1	2	.5	34	55	89	25.8	91	76	167	48.4	345	56	401
1902,	45	57	102	24.3	3	3	6	1.4	51	99	150	35.8	93	68	161	38.4	419	57	476
1903,	42	59	101	20.5	4	3	7	1.4	98	101	199	40.5	101	83	184	37.5	491	92	583
Totals,	195	247	442	22.9	12	10	22	1.1	273	336	609	31.6	485	370	855	44.3	1,928	245	2,173



NOV -6 '16

